

SAMPLE DO NOT REMOVE Operating Instructions

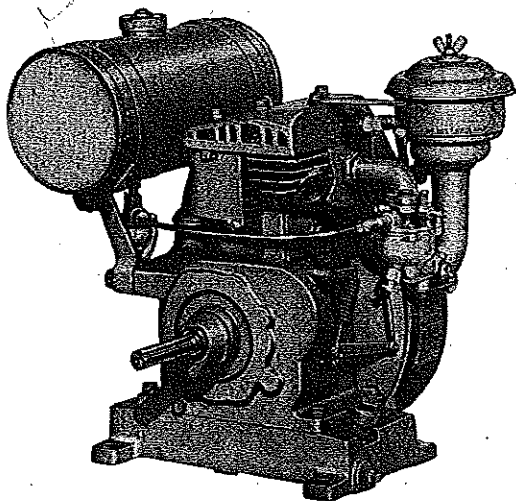
IMPORTANT
ALWAYS USE
GOOD, CLEAN OIL
S. A. E. No. 20
For Temperatures Below 32° F.
Use S. A. E. No. 10W
ADD OIL FREQUENTLY
CHANGE OIL REGULARLY

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Adjustment and Repair
Information • Parts List

MODELS

"A"—"AH"—"AHL"—"AHLP"—"AHMT"
"AHP"—"AHR4"—"AHR6"—"AL"—"ALP"
"ALR4"—"ALR6"—"AM"—"AMT"—"AP"—"AR4"—"AR6"
5 DIGIT TYPE NUMBERS FROM 20028 TO 95296 (INCL.)



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Read these instructions carefully before operating this Motor for the first time.

Guessing how to run it may cause you unnecessary inconvenience, aggravation or failure to receive the fine service that is built into it.

There is a right way to operate this Motor. This book tells you how.

Each Motor is carefully tested and adjusted at the factory before packing for shipment, and if correctly operated will perform beyond your expectations.

DO NOT START THIS MOTOR UNTIL YOU HAVE READ CAREFULLY THE "STARTING AND OPERATING INSTRUCTIONS" ON



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IMPORTANT SAFETY INFORMATION AND INSTRUCTIONS FOR ENGINE SELECTION ENGINE INSTALLATION ENGINE OPERATION

In the USA and Canada,
our 24-hour hotline is:
18002333723
Briggs & Stratton Corporation
Milwaukee, Wisconsin 53201
www.briggsandstratton.com

Keep these instructions for future reference.






Before installing and operating this engine read and observe all warnings, cautions and instructions on both sides of this sheet, on the engine, and in the operating & maintenance instructions.


NOTE: This sheet of instructions and safety information is not meant to cover all possible conditions and situations that may occur. Read entire Operating & Maintenance Instructions for this engine AND the instructions for the equipment this engine powers. Failure to follow instructions and safety information could result in serious injury or death.

The safety alert symbol () is used to identify safety information about hazards that can result in personal injury.

A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to indicate the likelihood and the potential severity of injury. In addition, a hazard symbol may be used to represent the type of hazard.








 **DANGER** indicates a hazard which, if not avoided, will result in death or serious injury.

 **WARNING** indicates a hazard which, if not avoided, could result in death or serious injury.

 **CAUTION** indicates a hazard which, if not avoided, might result in minor or moderate injury.

CAUTION, when used without the alert symbol, indicates a situation that could result in damage to the engine.

HAZARD SYMBOLS AND MEANINGS

 Fire	 Explosion	 Moving Parts
 Toxic Fumes	 Hot Surface	 Shock
 Kickback		

(OVER)

ENGINE SELECTION



 WARNING

Failure to select the correct engine could result in fire or explosion.



- Some engines are unique and designed for specific applications or types of equipment. If this engine will be used to build new equipment, contact Briggs & Stratton to ensure that the engine is appropriate for the intended use.
Note: For all Go-karts use only a model 136200 series engine, which offers improved safety and performance.
- Replacement engines should be the same model as the original engine, or be the Briggs & Stratton designated replacement engine. Refer to the Operation & Maintenance Instructions for engine identification information.
Note: For all Go-karts use only a model 136200 series engine, which offers improved safety and performance.
- Do not use Briggs & Stratton engines on 3-wheel All-Terrain Vehicles (ATVs), motor bikes, air craft products, or vehicles intended for use in competitive events. Briggs & Stratton does not approve of or authorize such uses.

ENGINE INSTALLATION



- [1] Do not attempt to install this engine if you do not have the appropriate tools and knowledge of small engine installation procedures. Use only Briggs & Stratton parts. Contact your Authorized Service Dealer for assistance.
- [2] Do not modify the engine in any way without Briggs & Stratton factory approval. Any such modification is at the owner's sole risk.
- [3] If the exhaust system on the old engine was supplied by the equipment manufacturer, you must transfer the exhaust system and related components (original muffler and related pipes, brackets, clamps, and shields) to the new engine. All components must be in good condition.
- [4]

 WARNING


 Install muffler (and muffler deflector if used) so outlet points away from operator, fuel tank, and equipment, and so muffler heat will not damage or deform engine and components.
- [5]



 WARNING


 Ensure all fuel lines and fittings are properly assembled and do not leak. Replacement parts must be the same model as the original.
- [6]



 WARNING


 Ensure all wiring, including safety switches and engine shut-off components are completely installed and functioning properly.
- [7] Set engine speed to equipment manufacturer's specification. Refer to equipment manufacturer's manual. Do not tamper with governor springs, or other parts that will increase engine speed above specification.



- [8]

 WARNING




 All engine parts, including fuel cap, spark plug, muffler, air cleaner, and covers and guards for drive components (gears, belts, shafts, couplings, etc.) must be in place before attempting to start engine.
- [9]

 WARNING


 If engine is installed on walk behind lawn mower, all mower components, including cutting blade, must be correctly installed before attempting to start engine.
- [10]







 WARNING


 When working on the engine or equipment, remove spark plug wire from spark plug. For electric start, remove negative wire from battery.
- [11]

 WARNING


 Do not check for spark with spark plug removed. Use Briggs & Stratton spark tester #19368.

ENGINE OPERATION

	 WARNING
When adding fuel:	
Turn engine off and let engine cool at least 2 minutes before removing gas cap. Fill fuel tank outdoors or in well-ventilated area. Fill tank to about 1 inch below lowest portion of neck to allow for fuel expansion. Keep gasoline away from sparks, open flames, pilot lights, heat, and other ignition sources.	
	 WARNING
When starting engine:	
Remove all external equipment/engine loads. Wait until spilled fuel is evaporated. Start engine outdoors. Pull cord slowly until resistance is felt, then pull rapidly. If engine floods, set choke to OPEN/RUN, place throttle in FAST and crank until engine starts.	
	 WARNING
When operating equipment:	
Do not tip engine or equipment at angle which causes gasoline to spill. Run engine outdoors. Do not run in enclosed area, even if doors or windows are open. Do not choke carburetor to stop engine.	

Starting and Operating Instructions

	Paragraph
Before Starting the Motor.....	1
How to Start.....	2
Failure of Motor to Start.....	3

	Paragraph
How to Stop.....	4
General Data.....	5

1. BEFORE STARTING THE MOTOR. Fill the crankcase with Mobiloil Arctic or any other high grade oil not heavier than S. A. E. No. 20 for operating motor in temperatures of 32° F. or above. Below 32° F. use Mobiloil "Arctic Special" or other high grade oil not heavier than S. A. E. No. 10-W.

The oil filler plug is painted blue and is located on top of motor base. With the motor level remove filler plug and pour oil in opening until it rises to the level of the filler plug opening. Crankcase holds three pints. Fill air cleaner with oil of the same viscosity as used in the crankcase to the indicated oil level. See paragraph 62. Fill the gas tank with a good clean third grade gasoline. Tank holds one gallon. Do not mix oil and gasoline. See paragraphs 11 to 19.

2. HOW TO START. Open gasoline shut-off valve in gas filter. Completely close the carburetor choke valve by moving the choke lever in a clockwise direction.

A. HAND CRANK STARTER TYPE. Press the starter shaft in to mesh gear with pinion on crankshaft. Crank rapidly to prime and start the motor. After motor starts, gradually open the choke valve by moving choke lever in a counter clockwise direction until motor runs smoothly with choke valve wide open. (A warm motor does not require as much choking as a cold motor.)

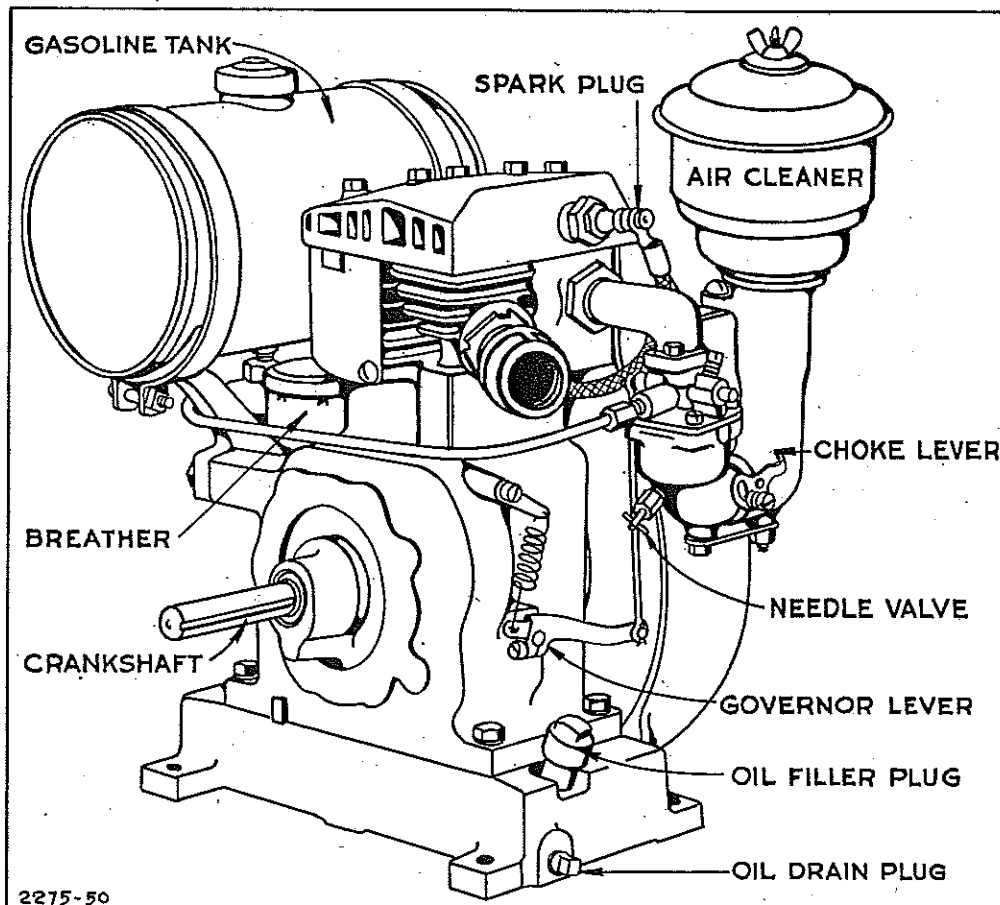
B. ROPE STARTER TYPE. Slip the knotted end of the starter rope into the notch of the starter pulley and wind the rope around it. Pull the rope with a quick steady pull to spin and start the motor. Operate choke as explained under 2-A.

3. FAILURE OF MOTOR TO START. COLD WEATHER causes the oil in crankcase to become thick and the gasoline less volatile. Should you experience trouble in starting, we suggest that you give your motor a little extra priming. Also be sure that the spark plug points are clean and the gap set at .025". See plate No. 6. If motor fails to start after a reasonable number of trials do not make any adjustments until you have studied the instructions referred to in the Servicing Reference Chart, on page 4.

4. HOW TO STOP. Press the stop switch mounted on the cylinder head against the end of the spark plug. Hold it until motor stops firing. This will ground the spark. To stop engines fitted with ignition shielding, press the red stop switch mounted on the blower case.

5. GENERAL DATA. You will find your motor substantially built. It is made of high grade materials by skilled workmen, in a factory fully equipped with the most modern machinery. Before it was shipped, it received many tests and careful inspections.

Plate No. 1



2275-50

Servicing Reference Chart

MOTOR FAILS TO START

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Out of Gasoline.....	1-16
Out of Oil.....	1-13-59-60
Dirty or Gum in Fuel System.....	16 to 19
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Carburetor Out of Adjustment.....	22 to 26
Spark Plug Dirty.....	32-33
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Poor Compression.....	47 to 58
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Air Cleaner Clogged.....	62
Motor Overloaded.....	64

MOTOR OVERHEATS

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Oil Needs Changing.....	14-15
Oil Too Heavy.....	14-15
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Poor Spark.....	31 to 46
Carbon.....	61
Muffler Clogged.....	63
Overloaded.....	64

MOTOR LACKS POWER

Lack of Oil.....	1-13-59-60
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Carburetor Out of Adjustment.....	22 to 26
Motor Not Up to Speed.....	27 to 30
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Poor Compression.....	47 to 58
Carbon.....	61
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Muffler Clogged.....	63
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6. Your motor will give you better service if you do not tinker with it. This does not mean, however, that it does not require a certain amount of attention. Give it the right kind of fuel, oil and care. Keep it clean both inside and out. You will be well repaid in trouble-free, satisfactory service.

7. If you should experience any difficulty, follow the instructions referred to in the **Servicing Reference Chart** above. If you cannot easily remedy it, consult your dealer or a nearby Briggs & Stratton Authorized Central Service Distributor. See page 22.

8. **OPERATING REQUIREMENTS.** A gasoline motor to operate properly must have all parts in correct adjustment to provide good ignition, carburetion, compression and cooling. And of equal importance, the oil and gasoline used must be clean and of recommended grades. The following instructions fully explain the simple

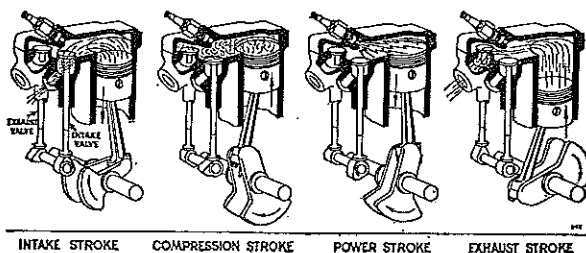
adjustments and offer operating recommendations that will assure you of complete satisfaction. We urge you to carefully observe them.

9. The reliability, economy and ease of starting which characterize this motor are due in part to the fact that it is of the 4-stroke cycle design commonly called "4-cycle," the same design used in all automotive motors. As the name indicates, there are four strokes to one complete power cycle.

10. **HOW A 4-CYCLE MOTOR OPERATES.** On the intake stroke the piston goes down, producing a vacuum in the cylinder, thereby drawing fuel up through the carburetor so that the space above the piston becomes filled with combustible gas. During this stroke the intake valve is open. Next the piston comes up on the compression stroke with both valves closed. At the top of the compression stroke a spark occurs at the spark plug, firing the

highly compressed gas. This produces an explosion above the piston which forces it down on the **power stroke**. Both valves are closed. On the next upstroke of the piston, called the **exhaust stroke**, the exhaust valve is open, and the burned gases driven out. See plate No. 2.

The 4-Stroke Cycle
Plate No. 2



11. KEEP THE MOTOR CLEAN. It will pay you to keep your motor clean both inside and outside. See that no dirt or water enters motor when filling with oil or gasoline. As a precautionary measure always wipe off the gasoline cap and oil filler plug, as well as around them before refilling. Dirt in the motor or gasoline tank will cause trouble and even serious damage. Also be sure to remove any dirt or grass that may accumulate in the fly-wheel housing or between cylinder fins.

12. USE THE RIGHT KIND OF OIL. Correct lubrication is important. We recommend the use of Mobiloil "Arctic" S. A. E. No. 20 for operating this motor in temperatures of 32° F. or above. Below 32° F. use Mobiloil "Arctic Special" or other high grade oil not heavier than S. A. E. No. 10W.

A heavier oil which might be satisfactory in a tractor or for lubricating farm machinery must NOT be used. Do not mix oil with gasoline. This 4-cycle motor is provided with an independent efficient pump lubrication system which forces a stream of oil to all moving parts of the motor. There are no external parts which require separate oiling.

13. ADD OIL REGULARLY. A motor which is run without oil will be ruined within a few minutes. To avoid the possibility of such an occurrence and the resulting expense, always fill the oil reservoir at the blue plug to the top of the filler plug opening after each five hours of motor operation. Capacity of oil reservoir is three pints.

14. CHANGE OIL FREQUENTLY. After every twenty-five hours of motor operation, the oil should be completely drained from the crankcase. Do not remove motor from its mounting base. Remove the yellow oil drain plug, located at either end of motor base, and let the oil flow into a pan or other receptacle you use. We do not recommend flushing out with kerosene. Replace the drain plug, refill with fresh oil and replace the blue filler plug.

15. In the normal running of any motor, small particles of metal from the cylinder walls, piston and bearings will gradually work into the oil. Dust particles from the air also get into the oil. If the oil is not changed regularly these foreign particles cause increased friction and a grinding action which shortens the life of the motor. Sludge, a gummy mass, forms which clogs up the oil passages. Fresh oil also assists in cooling, for old oil gradually becomes thick and loses its cooling as well as its lubricating qualities.

16. USE CLEAN GASOLINE. A good third grade clean, fresh gasoline is recommended. Too high test gasoline may form vapor-lock in gas line when motor gets hot. This interrupts the flow of gasoline and causes motor to stop. Be sure that the small vent hole in the gasoline tank cap is not clogged up, for air must enter the tank to allow the gasoline to flow to the carburetor. Test by blowing through top of cap. See paragraph 18.

17. AVOID GUMMY GASOLINE. If you experience trouble with a gummy, sticky substance with a peculiar sharp obnoxious smell, change to another grade of gasoline. This gum comes from the gasoline and clogs carburetor, gas line, gasoline tank, etc. You can check your gasoline by evaporating a half pint in an open dish. If a quantity of gum remains, try another kind that is clean and fresh.

18. YOU CAN AVOID MOST TROUBLE FROM GUM IF YOU WILL KEEP THE TANK FULL WHEN YOU ARE NOT USING THE MOTOR. If you use it only occasionally, drain tank completely and refill when motor is used again. The reason for this is that evaporation of stale gasoline causes most gum deposits.

19. TO CLEAN THE FUEL LINES. Disconnect the gasoline line at the carburetor and also at the gas filter. Blow through the gas line to clear it. To clean the gas filter, first close the shut-off valve and loosen thumb screw. Remove and clean glass bowl, gasket and screen. Open shut-off valve to see if gasoline flows freely from the tank. **IMPORTANT:** If you find a gummy varnish-like substance, alcohol or acetone will dissolve it. See paragraphs 17 and 18.

20. CORRECT USE OF THE CHOKE. The correct carburetor setting (see paragraph 23) gives the motor the best mixture to run on when it is hot. For starting, it is necessary to choke the carburetor to get a rich mixture, because cold gasoline does not vaporize readily. A warm or hot motor requires very little choking. Until you become familiar with your motor, however, you may make the mistake of not choking the carburetor enough or you may choke it too much. If motor fails to start after cranking three or four times with the choke closed, try cranking two or three times with the choke partly closed and then all the way open. Use motor choke the same as you use an automobile choke.

21. TO PRIME THE MOTOR. The motor may fail to start for the reason that either the carburetor is incorrectly adjusted or dirty, or the fuel line is dirty or clogged, or you are out of gasoline. To determine the cause, prime the motor by removing the spark plug and pour a half teaspoonful of gasoline into the spark plug opening. Replace the spark plug and crank the motor. If it fires for three or four revolutions and stops, the difficulty is definitely in the fuel system. See paragraphs 19, 22 to 26. If motor will not fire at all, check the ignition system, see paragraphs 31 to 46, also compression, paragraphs 47 to 56.

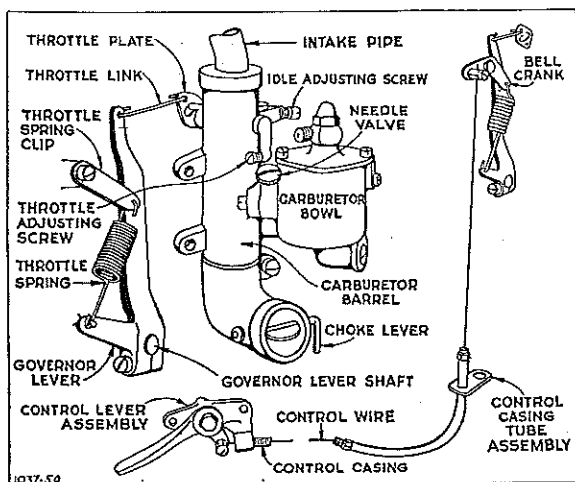
22. TO ADJUST THE CARBURETOR. The carburetor on this motor is of the gravity type. The gasoline supply is regulated by a needle valve. The throttle is automatically controlled by the governor, see paragraphs 27 to 30.

23. To adjust the carburetor, completely close needle valve by turning to right or clockwise as far as possible. Do not screw up too tight or use force when closing needle valve, or needle valve may be damaged. From closed position, open needle valve one to one and one-quarter turns. After the motor has been started and warmed up make final adjustment with the choke wide open by turning the needle valve to the point at which motor operates most smoothly with full load. This setting will also take care of starting with use of the choke. When starting cold motor, if it is necessary to keep choke partially closed several minutes before motor runs smoothly, carburetor setting is too lean and needle valve should be opened a notch or two—turn to left. For governor adjustments see paragraphs 27 to 30.

24. The throttle lever adjustment screw is set at the factory to permit an idling speed of about 1200 R. P. M. We do not recommend adjusting the throttle to bring the speed lower. If you want to idle the motor at a higher speed than 1200 R. P. M. turn the throttle lever adjusting screw to the right or in a clockwise direction.

25. TO REMOVE AND REPLACE CARBURETOR ON MOTORS WITH 5-DIGIT TYPE NUMBERS. Disconnect gasoline line from the carburetor and gasoline filter. Unhook the throttle spring from the throttle spring clip. Remove the two screws and lockwashers holding the carburetor to the crankcase. Loosen the carburetor from the intake pipe by working from side to side. With the carburetor in your right hand, hold governor lever with the left and turn carburetor to the right. Then bring the carburetor toward the governor lever, permitting the open end of throttle link to slip out of the hole in the throttle plate of carburetor barrel. To replace, reverse the operations as performed above. Be sure the open ends of throttle link are toward the crankcase. See plate No. 3.

**Carburetor, Governor and Manual Control Hook-Up
Plate No. 3**



26. TO CLEAN CARBURETOR ON MOTORS WITH 5-DIGIT TYPE NUMBERS. To clean the carburetor, remove it from the motor as explained in paragraph 25. Unscrew the carburetor cover nut. Remove cover from the bowl and blow through the small holes in the inlet stem. Remove the float from the bowl. Remove the bowl from the carburetor barrel by unscrewing the two small screws. Remove the needle valve. Wash all parts in gasoline and blow through all openings. Do not use wire to clean openings. If inlet valve or seat is worn, both should be replaced or carburetor will leak. Assemble the carburetor by reversing the operations as performed above. If necessary, use a new gasket between carburetor bowl and barrel. **IMPORTANT:** Care must be used not to damage the sharp or tapered end of float stem. Replace it in the same manner as removed, with the tapered end at the top. This acts as inlet valve and inlet valve seat when the cover is replaced.

27. GOVERNOR—CORRECT MOTOR SPEED. The speed of your motor is automatically maintained under varying loads by a centrifugal governor. It is operated from the cam gear.

28. The governor was carefully adjusted at the factory to maintain normal speed under load. Do not re-adjust unless absolutely necessary. It can be changed by raising or lowering throttle spring clip. Raise the throttle clip to increase motor speed and lower to decrease motor speed.

29. RESETTNG GOVERNOR LEVER. If the governor lever has been loosened or removed from the governor shaft, it is easily reset. With the carburetor attached to motor and hooked up to governor lever with throttle link, loosen screw holding governor lever on the shaft. Push the governor lever toward the left as far as it will go. Hold it in this position and turn the governor

shaft to the right with pliers until it strikes a stop in the crankcase. Tighten screw that holds governor lever to shaft until the lever is snug. Push governor lever to the right as far as it will go and tighten screw securely.

30. Some motors are equipped with manual or remote carburetor control as shown in plates Nos. 3 and 3-A. To increase motor speed, move control lever away from boss on the control lever base. This adds more tension to the throttle spring allowing carburetor throttle to open wider. To decrease motor speed, move the control lever toward the boss on the control lever base.

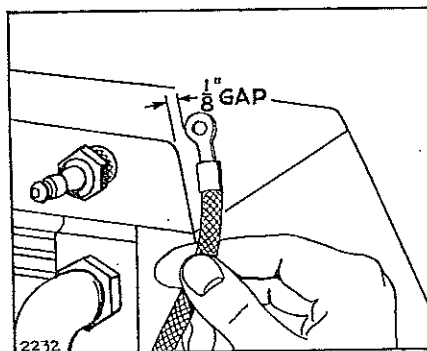
31. THE IGNITION SYSTEM. The spark is produced by a high tension magneto consisting of armature, condenser, contact points and rotating magnets cast in a flywheel. This is a simple self-contained system which is very reliable. It also does away with batteries. The ignition current is sent into the motor cylinder through the ignition cable and spark plug. The magneto itself as well as the cable and spark plug must all be in proper condition and adjustment to insure a good hot spark.

32. TO CHECK FOR SPARK. To prove that a satisfactory spark is being delivered by the magneto, remove the ignition cable from the plug. Hold ignition cable terminal about $\frac{1}{8}$ " from any metal part of the cylinder head (keep hand on insulated part of the cable to avoid a shock). Turn motor with starter, and if the spark jumps this gap the entire ignition system, with the exception of the spark plug, is O.K. See plate No. 5. (To check spark plug see paragraph 33.) If no spark, check cable, see paragraph 34, and refer to magneto adjustments paragraphs 35 to 46.

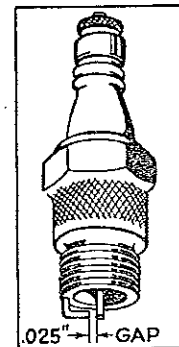
33. SPARK PLUG ADJUSTMENT. Spark plugs should be cleaned and points reset to .025" after each 100 hours of operation. See plate No. 6. Points burn away in service. The porcelain is to prevent the spark from jumping anywhere except at the gap, and if cracked or broken it will prevent the plug firing. Water on the outside of the spark plug may permit the high voltage current to leak over the surface of the porcelain. Dirt or carbon on it will do the same thing. The spark plug can be cleaned by washing off the carbon with gasoline or kitchen scouring powder. Points should be scraped or sand-papered. See plate No. 6. Always keep a new plug on hand. Use Champion No. 8 Com'1 (18mm) spark plug or its exact equivalent. For heavy continuous service, use Champion No. 5 Com'1 or exact equivalent. When reassembling spark plug to cylinder head put a little graphite grease on threads. Do not get grease on points.

34. IGNITION CABLE. Insulation must not be broken, or soaked with oil or water, or grounded in any way where it touches the motor, or it will interfere with good ignition. Spark plug cable should be fastened to the secondary terminal (small brass plate coming out of the coil).

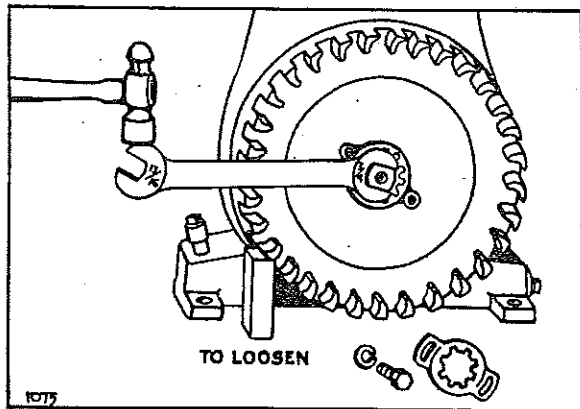
**Checking Spark
Plate No. 5**



**Spark Plug
Plate No. 6**



Removing Flywheel
Plate No. 7



35. **TO REMOVE AND REPLACE FLYWHEEL.** The flywheel is securely mounted to the crankshaft by means of a taper fit, a soft flywheel key, right hand thread starter pulley and lockwasher or crank pinion gear and lock or ratchet nut. Remove the blower housing. Place a wood block under flywheel fin on left side of flywheel to hold it rigid and prevent turning. See plate No. 7.

A. CRANK STARTER MOTORS. Unscrew two screws and lockwashers holding pinion gear lock on flywheel. Use a $\frac{3}{4}$ " open end wrench on pinion. To start pinion, tap end of wrench handle lightly with hammer, to the left. Tap carefully or a broken fin may result which will throw the flywheel out of balance. Remove flywheel with flywheel puller, No. 29157, provided with motor.

B. ROPE STARTER MOTORS. Place a long bar or a heavy screwdriver through hole in starter pulley. To start pulley, tap end of bar lightly with hammer, to left. Tap carefully or a broken fin may result which will throw the flywheel out of balance. After pulley is removed, unscrew two screws and washers from flywheel. Remove flywheel with flywheel puller, No. 29157, provided with motor.

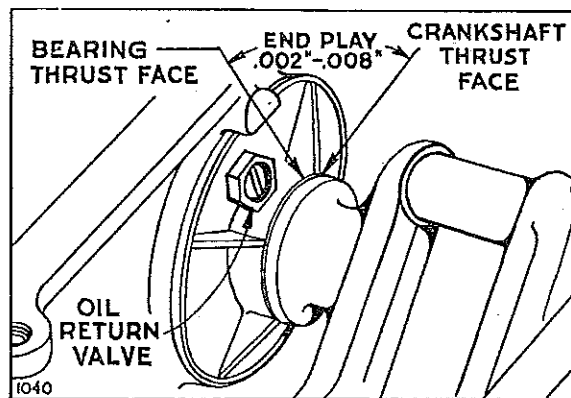
C. HAND LEVER STARTER MOTORS. To remove ratchet nut, use a 1" open end wrench. To start nut, tap end of wrench handle lightly with hammer, to the left. Tap carefully or a broken fin may result which will throw the flywheel out of balance. Remove ratchet, pawl assembly and spacer. Unscrew two screws and lockwashers from flywheel. Remove flywheel with flywheel puller, No. 29157, provided with motor.

36. **TO REASSEMBLE.** Locate flywheel on crankshaft with key. Reverse operations given in paragraphs Nos. 35, 35-A, 35-B and 35-C. Draw starter pulley, pinion or ratchet nut up very tight by tapping bar or wrench handle with hammer.

37. **TO REMOVE AND REPLACE MAGNETO ASSEMBLY.** After removing flywheel as explained in paragraph 35, detach the ignition cable from the spark plug, remove flywheel key, contact point dust cover and the four magneto mounting screws. Turn the crankshaft so that the contact plunger holds the contact points open and then remove magneto assembly. To replace reverse the operations and use the old gasket between the plate and crankcase, or, if damaged, a new gasket. See part 66457, 66527, 66537 for proper thickness to get correct end play of .002" to .008" between magneto bearing and crankshaft thrust faces, as shown in plate No. 8. Use lockwashers under mounting screws.

38. **MAGNETO TIMING.** The magneto assembly is always correctly timed with the motor when the flywheel is assembled to the tapered crankshaft with a key and securely held in place with

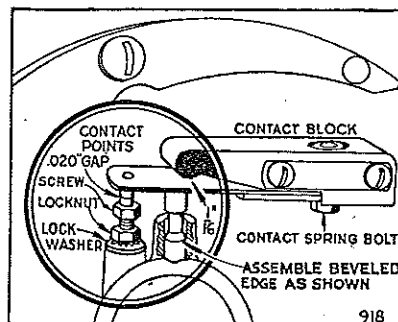
Correct End Play
Plate No. 8



right hand threaded nut. Do not attempt to change the timing by relocating any parts or filing crankshaft timing flat. Always use soft key part No. 66403. If steel key is used and flywheel becomes loose it will damage the keyway in the crankshaft.

39. **TO ADJUST AND CLEAN CONTACT POINTS.** While magneto plate is on motor crankcase, turn crankshaft by hand to see if contact points open and close properly. Points must be clean and line up squarely to make good electrical contact. Do not use a steel file on contact points — use a carborundum contact point file.

Magneto Contact Points
Plate No. 9

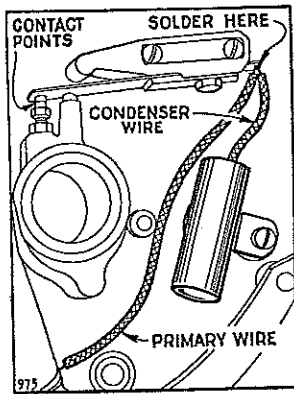


40. To line up contact points loosen contact spring bolt. Move contact spring assembly to line up with contact screw point. Tighten contact spring bolt. To adjust contact spring tension, turn crankshaft until points are in open position, then place $\frac{1}{8}$ " gauge between contact spring and round end of contact block, and tighten contact block screws. Turn contact screw to secure .020" gap and tighten locknut against lockwasher. See plate No. 9. If either or both points become badly pitted or burned, replace both points, part Nos. 63238 and 69754.

41. **TO REPLACE CONDENSER.** A leaky or weak condenser may cause the motor to start hard, to sputter, or misfire under load. If motor misfires after checking gasoline line, carburetor, spark plug, cable and contact points, install a new condenser. Slip the short insulator sleeve over the condenser wire. Solder the end of condenser wire and primary wire to contact spring. (See plate No. 10.)

42. If after new condenser has been installed the ignition system still does not deliver a satisfactory spark, we recommend sending the complete magneto unit including the flywheel to the nearest Briggs & Stratton Central Service Distributor listed on page 22 for proper adjustment.

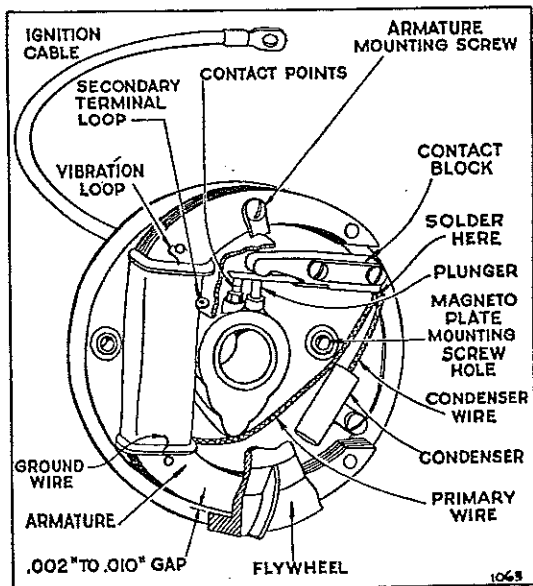
**Condenser Installation
Plate No. 10**



43. **TO REPLACE ARMATURE.** Remove armature lead wire from contact spring, and high tension ignition cable from secondary terminal loop in the armature. Both wires are soldered. Save as much of the hydrolene as possible so that you can insulate high tension terminal when you assemble new armature. Do not use battery compound or tar as it will melt and run over the entire magneto assembly. Unscrew two armature mounting screws and pry armature loose with screw driver.

44. To install armature, place dust cover clip under upper mounting screw, tighten lower mounting screw. Then fasten ignition cable to the terminal and fill pocket, formed with flap, with hydrolene. Solder armature lead wire to contact spring. Replace dust cover and the clip holding cover in place, tighten upper armature mounting screw. See plate No. 11.

**Complete Magneto Assembly
Plate No. 11**



45. Air gap of .002" to .010" must be maintained between armature shoes and flywheel poles. Gap must only be sufficient to prevent rubbing but not over .010" or poor ignition will result.

46. To check armature shoes for rub, chalk edges and mount flywheel in place. Remove spark plug to release compression. Turn flywheel several revolutions by hand. Remove flywheel and examine edges of armature shoes. High spots will have the chalk rubbed off. File high spots carefully with a fine file until flywheel no longer rubs, but do not remove too much metal.

47. **CYLINDER HEAD.** The cylinder head is held on with six cap screws. When the cylinder head has been removed for the purpose of cleaning carbon or grinding valves, care should be used in replacing it. Use a new gasket if possible. Otherwise, clean the old one and coat both sides with cup grease. We do not recommend the use of shellac on cylinder head gaskets. Tighten each cap screw a little at a time so that the cylinder head is pulled down evenly. Screws need be only moderately tight.

48. **COMPRESSION.** Proper compression is obtained when valves seat properly, gaskets do not leak, and piston and rings are properly fitted. When tuning up a motor, it is always well to check compression. This is done by turning the motor over quickly by hand. If turned slowly sticky valves may not be detected. If a point of resistance is offered every other revolution, compression should be satisfactory. If motor turns over without compression resistance for a full cycle, it is possible that a worn piston or piston rings, leaky valves or leaky gaskets are present. See that spark plug has a gasket under it and is drawn up tight. Also check cylinder head gasket and tighten cylinder head bolts.

49. **VALVE ADJUSTMENT.** To check valve clearance, remove valve cover plate. The correct clearance on the exhaust valve is .007" to .009". The clearance of the intake valve on all model "A" motors is .005" to .007". These clearances to be adjusted when motor is cold.

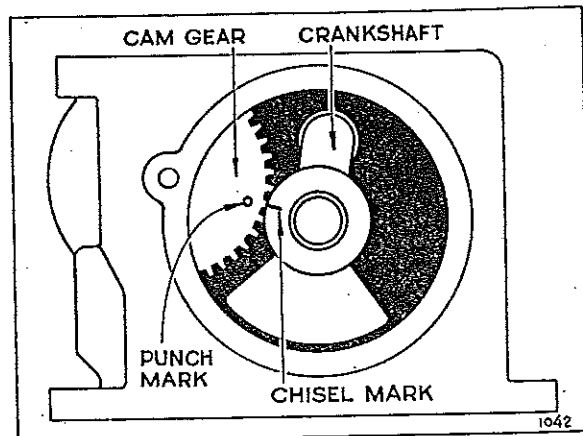
50. To remove valves, remove cylinder head, and if not dismantled, drain oil from crankcase. Invert cylinder. Compress the spring with valve spring compressor No. 69189-T3, and with the end of a screw driver push out the split collars, and release spring compressor. Tilt cylinder back far enough to allow valve to drop, permitting its stem to clear the spring. Pry spring out with end of screw driver.

51. To replace valves and valve springs, compress spring in valve spring compressor. Turn tool to inverted position with collar retainer washer on top. Drop split collar in place in retainer washer one at a time. When first half of split collar is placed in retainer washer, push it around to the back of valve stem to allow easy placing of second half. Special valve spring compressor tool part No. 69189-T3 is available at the factory at \$1.25 net.

52. To reseal valves, grind in the same manner as automobile valves. If valves stick they may be coated with gum or carbon. To remove gum use alcohol or acetone. Clean valve stems thoroughly with wire brush or emery cloth. Also scrape all carbon from valve ports.

53. The timing of the valves is taken care of by the meshing of the cam shaft gear with the gear on the crankshaft. These gears are properly meshed when the mark on the cam shaft gear is in line with the mark on the crankshaft collar. See plate No. 12.

Valve Timing — Plate No. 12



54. PISTON. The piston in this motor is made of a special aluminum alloy which is very light in weight. The top and second lands of the piston are smaller than the skirt to allow for greater expansion at the piston head. This clearance is to compensate for the considerable expansion of aluminum when hot. When piston is removed be sure to thoroughly clean carbon from head of piston and ring grooves. If the piston is out of round or scored it should be replaced.

55. When fitting a new piston in the motor, assemble it with the free side pin hole with an "X" on boss, toward the magneto side. If an oversize piston is necessary, we recommend that reboring of cylinder be done by an Authorized Central Service Distributor or the factory.

56. PISTON RINGS. The piston rings when fitted in the cylinder should have a gap of .007" to .017". The rings should be fitted in the cylinder below the piston ring travel. Before assembling new rings to piston be sure that piston ring grooves are thoroughly cleaned and rings move in grooves freely.

57. PISTON PIN. The piston pin is a free fit in one side of the piston and a tight fit in the other. To remove this pin without special equipment, it is advisable to heat the piston in boiling water which causes the aluminum alloy to expand. Cut a wooden pin a little smaller than the size of the piston pin and use this and a hammer to drive the pin out. Drive the pin out through the free fit hole. This hole is toward the magneto side and is indicated with an "X" on the pin hole boss. You should, of course, drive the pin out while the piston is still hot. To easily replace the pin the piston should be heated. In later model motors the piston pin is a slip fit in the piston. To remove it from the piston first remove lock rings, then slip pin out of piston.

58. CONNECTING ROD. The connecting rod is also made of a special aluminum alloy which combines strength with light weight. When assembling connecting rod to crankshaft, the assem-

Connecting Rod — Plate No. 13

Fig. 1

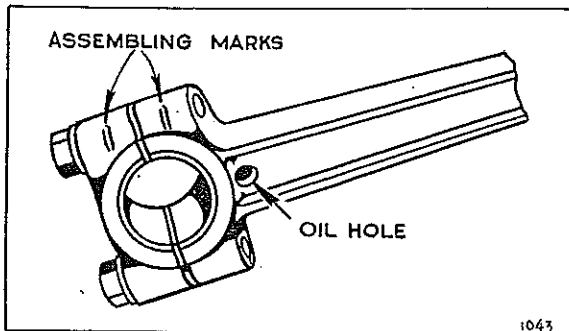
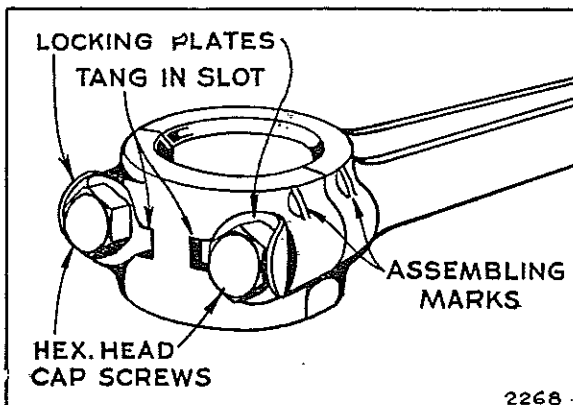


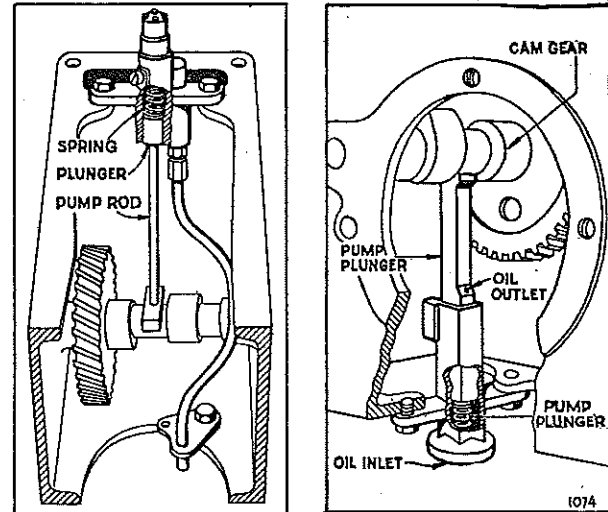
Fig. 2



bly marks at lower bearing must be toward the magneto side. See plate No. 13. The assembly marks on cap and rod must be on the same side.

59. OIL PUMP. The oil pump is assembled to the crankcase with two bolts and lockwashers and is operated from an eccentric on the cam gear. An inoperative pump will result in insufficient lubrication which may score cylinder and piston assembly. To check oil pump, remove base and the two bolts that hold pump in place. Place the pump in a pan of oil about 1/2" deep. Work plunger up and down. A stream of oil will be forced out

Oil Pump — Plate No. 14



of the hole in the oil tube or out of plunger, if the pump is in good operating condition. If clogged, remove plunger and plunger-spring and submerge the parts in gasoline or kerosene for three or four hours to loosen accumulated sludge or gum. If the pump is still inoperative, it should be replaced. In assembling, be sure that spring and plunger are in place as shown in plate No. 14.

60. OIL LEAKS. If oil leaks from either end of crankshaft bearings, remove base from motor. Oil return valves are screwed into crankcase and magneto back plate below main bearings. Remove oil return valve and clean or flush with gasoline and blow out any dirt lodged under the small disc. Replace if necessary. See plate No. 8.

61. CARBON. Excessive carbon is caused by improper grade of oil—too much oil usually the result of piston rings not seating properly or sticking—carburetor set too rich—or long service. An unusual amount of carbon is noticeable by motor knocking or loss of power. Occasionally remove carbon from valves, valve ports, piston head, piston rings and ring grooves, cylinder head and top of cylinder bore.

62. AIR CLEANER. The air cleaner is to protect the motor from dust and dirt. No motor can stand up under the grinding action that takes place when dust and dirt particles are drawn into the motor through the carburetor. Air Cleaners should be cleaned occasionally as follows:

OIL BATH TYPE: Wash the outside of the filter element with a rag or brush dipped in gasoline or kerosene. Do not submerge. Then clean bowl by submerging it in gasoline or kerosene. Fill cleaner with oil of the same viscosity as used in crankcase, up to the level marked on cleaner bowl. See instructions on air cleaner label.

FELT TYPE: Remove the felt regularly and brush out accumulated dust and dirt. Then wash felt thoroughly with gasoline. Make sure felt is dry before replacing.

63. MUFFLER. After long periods of service it is possible that the muffler will become clogged to the point where it will affect the motor's power. To check the muffler unscrew it from the motor and run water into the open end of the muffler. If full streams of water come out of the small holes at the end of the muffler, you will know that it is not clogged up. If the water runs through very slowly, however, the muffler is probably clogged and should be replaced.

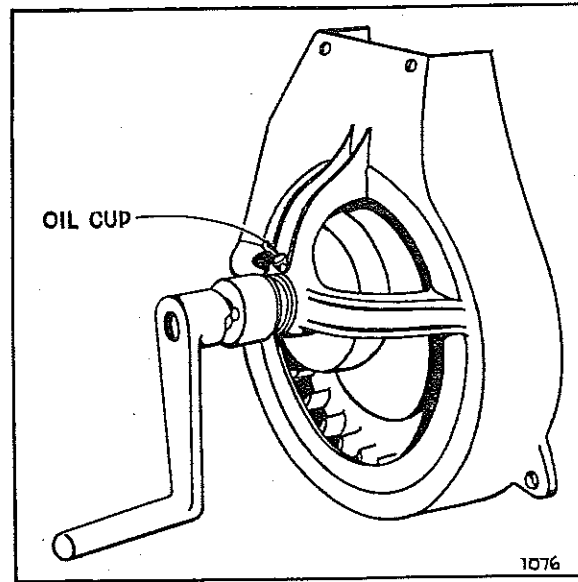
64. OVERLOAD. Always be sure that the machine the motor is operating is well lubricated and running freely. If it is not, it may cause the motor to become overloaded resulting in it overheating, losing power, or even stopping entirely.

65. HAND CRANK AND LEVER STARTERS:

A. HAND CRANK. Tighten pinion gear on crankshaft securely. Oil crank gear shaft through the oil cup and grease the pinion and crank gear teeth occasionally to reduce wear. See plate No. 15.

B. HAND LEVER. Be careful to assemble parts correctly. The starter return spring must have sufficient tension to return lever against its stop on blower case. To increase tension of spring move small hook at end of spring back to next peg. Oil starter shaft at bracket occasionally to reduce wear.

Plate No. 15



66. PARTS. All parts should be ordered from your dealer or nearest Briggs & Stratton Service Distributor, listed on page 22.

Repair Parts

	Paragraph
Always Give Type, Model and Serial Number	68
How to Make Out Parts Orders	70
Prices	74

	Page
Parts Illustrations	11 and 12
How to Find Correct Part Number	13
Parts List	13-21

67. To assure continued satisfactory performance, do not attempt to use substitute repair parts when overhauling or repairing the Briggs & Stratton Motor. Insist that all repair parts be original Briggs & Stratton parts.

68. ALWAYS GIVE TYPE, MODEL AND SERIAL NUMBERS. Briggs & Stratton motors are identified by a type number, model letter and a serial number. This information is stamped on a metal plate attached to the blower housing.

69. When writing to the factory or to a Central Service Distributor for service information, or when ordering new parts, be sure to specify the type number, the model, and the serial number of the motor to be serviced. This will assure prompt and efficient service without unnecessary correspondence.

70. HOW TO MAKE OUT PARTS ORDERS. Print your name and address plainly and correctly. Do not abbreviate name of town or state. Specify on the order how shipment to you is to be made. This will assist in giving prompt and efficient service.

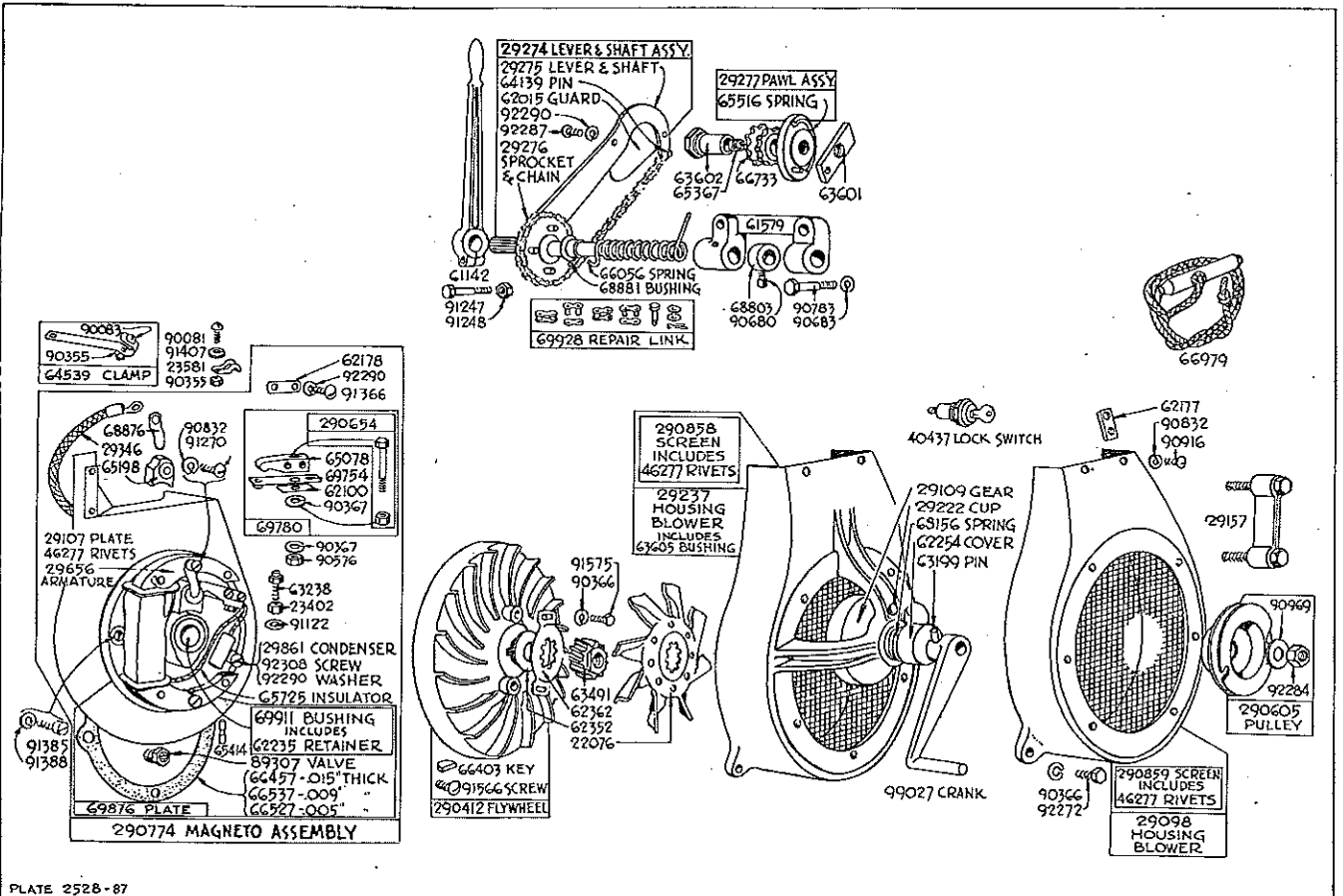
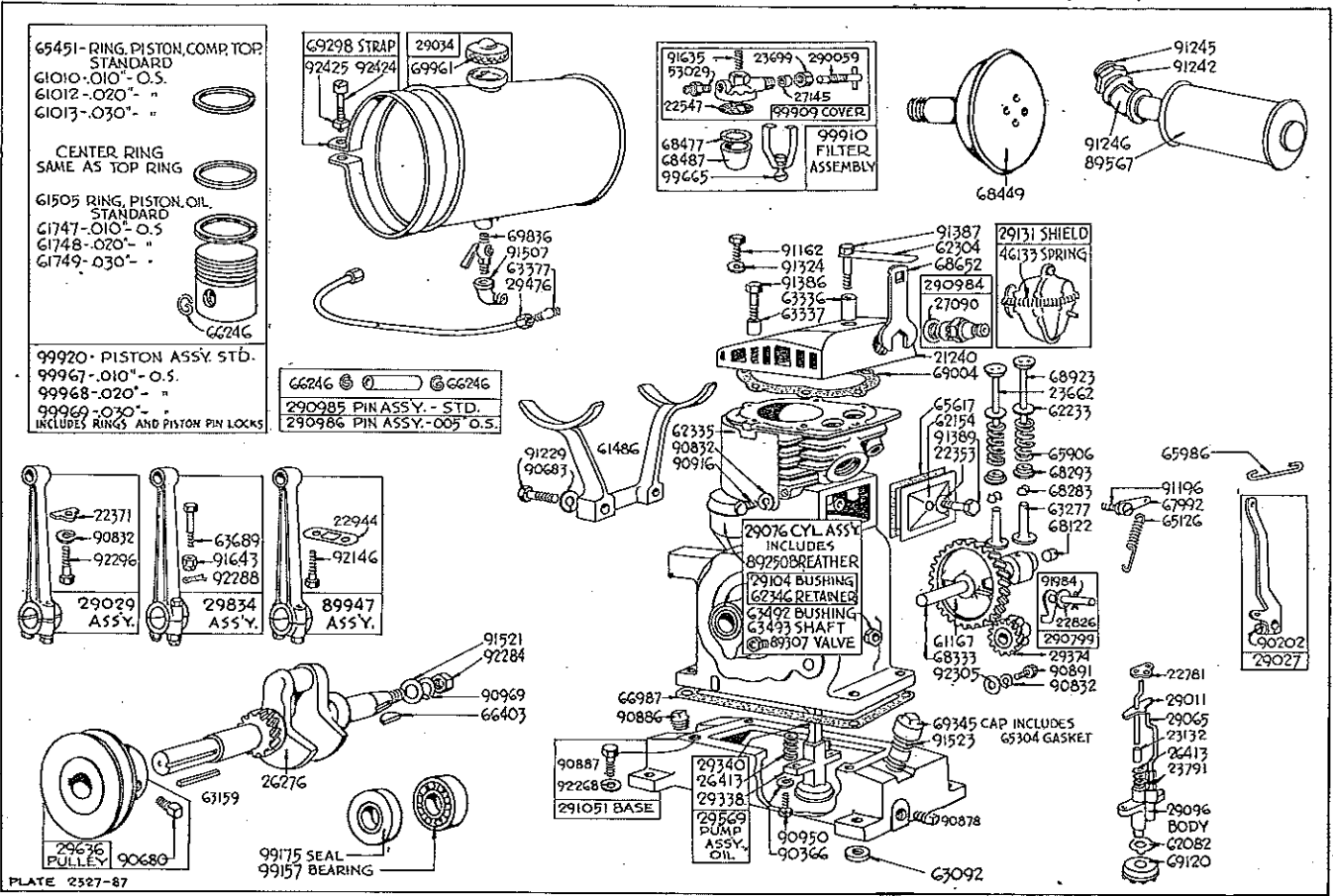
71. Give part number and name of parts wanted. (Do not use number cast on parts.) You will find the part numbers, names and prices on pages 13 to 21, and parts illustrations on pages 11 and 12.

72. After you have made out order, check back to see that you have followed all instructions and have accurately listed what you want.

73. Shipments will be made C. O. D. or send remittance with order to cover parts and add what you think will be sufficient for postage. Send postal or express money order, bank draft or certified check for this amount. Do not send currency in a letter. It is not safe.

74. PRICES. All prices in this book are subject to change without notice. In case of change in prices, orders will be filled at current prices. All prices shown are F. O. B. Factory at Milwaukee, Wis., or nearest Authorized Central Service Distributor. Prices outside U. S. A. subject to local import duties, taxes, etc.

THIS BOOK COVERS 5 DIGIT TYPE NUMBERS ONLY — 20028 TO 95296 (INCL.)



Assemblies include all parts shown in brackets

THIS BOOK COVERS 5 DIGIT TYPE NUMBERS ONLY — 20028 TO 95296 (INCL.)

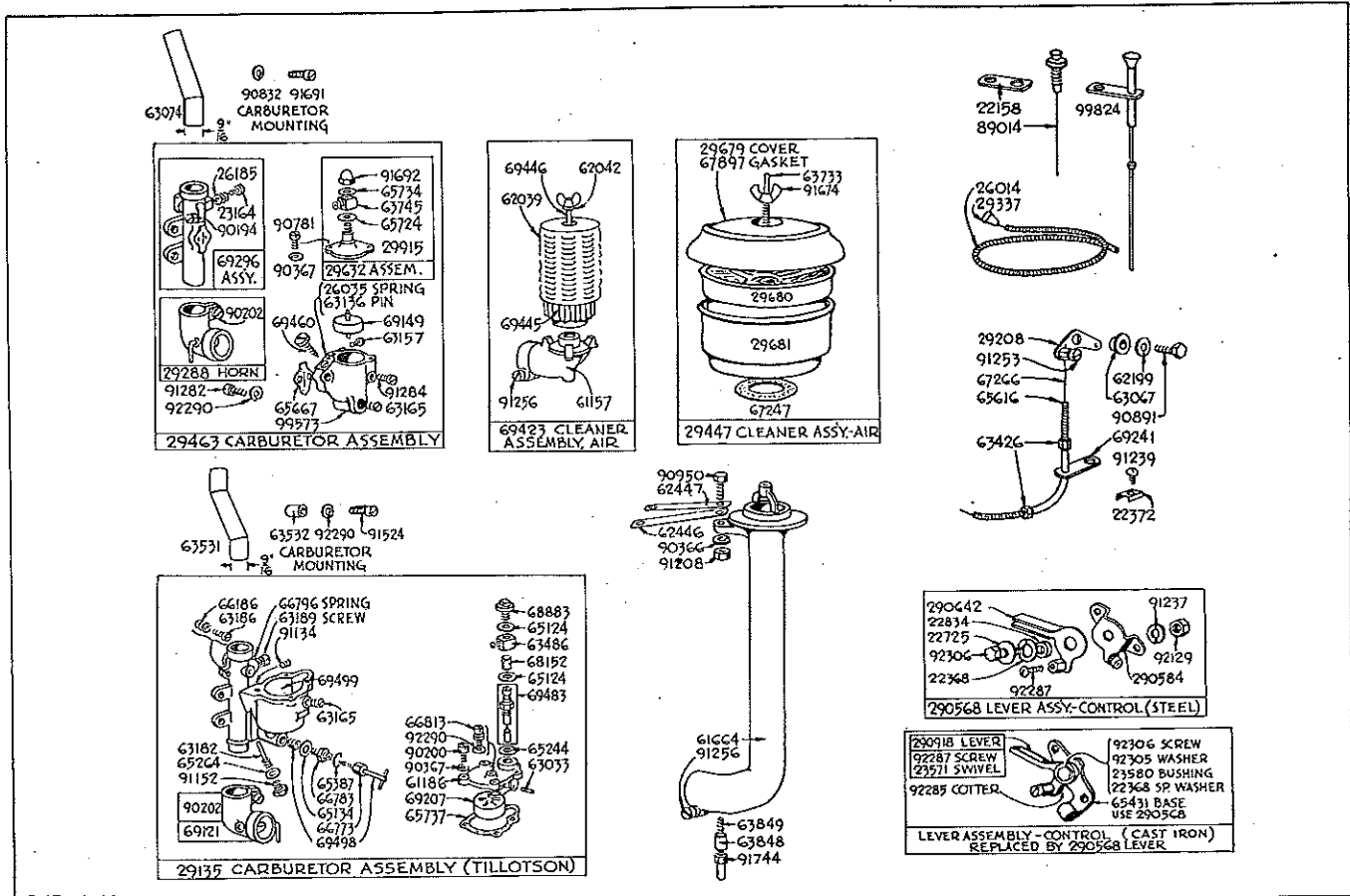


PLATE 2529-87

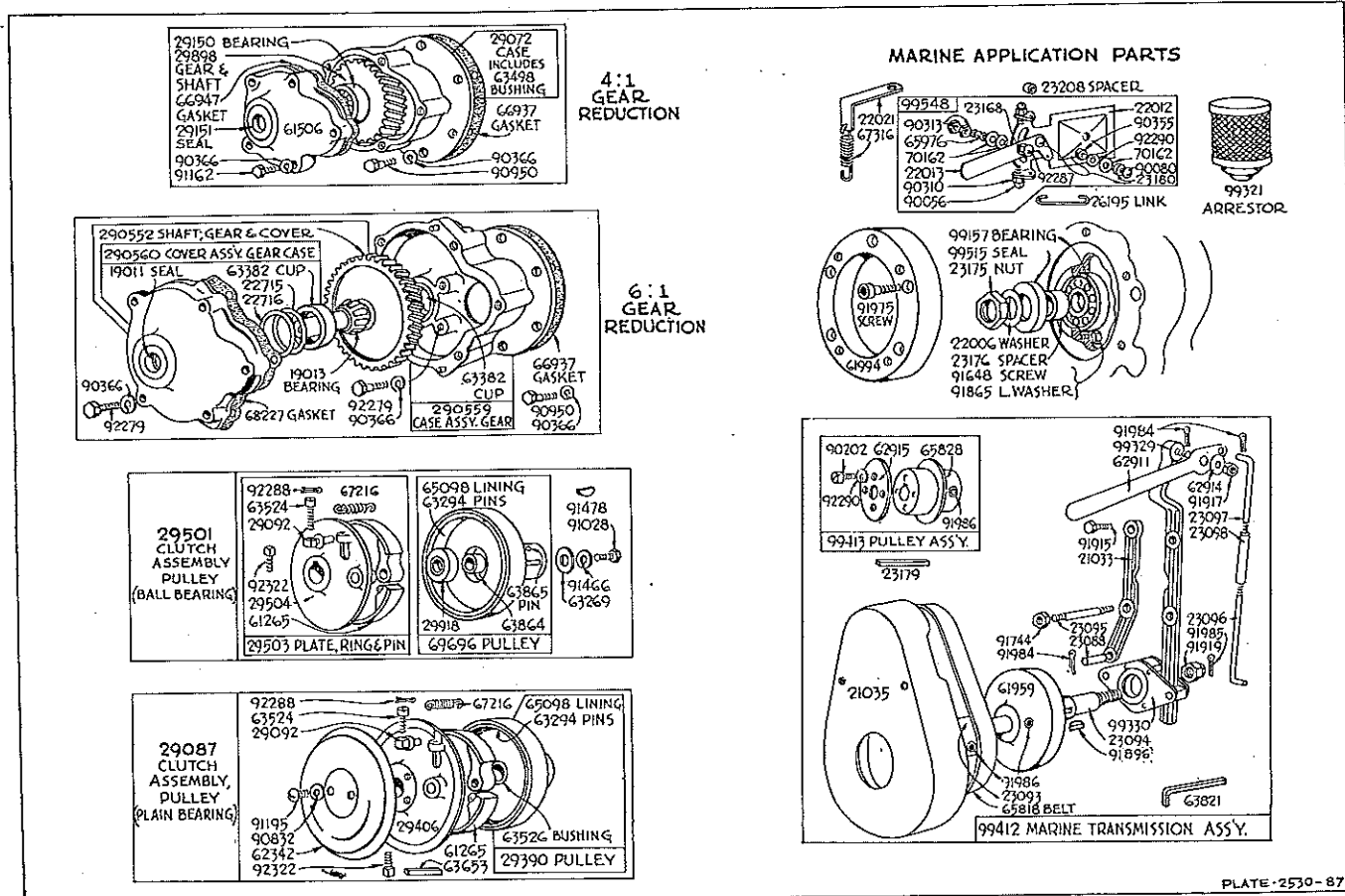


PLATE 2530-87

Assemblies include all parts shown in brackets

TO FIND THE CORRECT NUMBER OF THE PART YOU NEED

1. Make a note of your engine TYPE NUMBER (Not the Serial Number) that appears on the metal nameplate attached to engine blower housing.
2. Refer to pages illustrating parts and locate the Master Part Number by comparing your old part with the illustrations. Assemblies include all part numbers bracketed in illustrations. All parts shown in assembly brackets on which part numbers are given can be purchased separately.
3. After the Master Part Number has been identified, refer to the following Parts List where these Master Part Numbers are listed in numerical order.
The Master Part is used on all types of engines except those types listed under "Note."
4. If a "Note" appears below the Master Part Number, this means that this part is made different from the Master Part for certain types and if your type is listed under "Note," order the part referred to.
5. If two or more parts are bracketed (—) under "Note," they are used to replace the Master Part on the type numbers shown.
6. If your Engine Type Number does not appear after any part number listed under "Note," order the Master Part Number.
7. When ordering parts — or writing for service information — always specify the MODEL LETTER — TYPE NUMBER — and SERIAL NUMBER of your engine.

Parts List

MODELS "A"—"AH"—"AHL"—"AHLR"—"AHP"—"AHR"—"AHR4"—"AHR6"—"AL"—"ALP"
"ALR4"—"ALR6"—"AM"—"AMT"—"AP"—"AR4"—"AR6"

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
19011	Seal—Oil	2	23581	Clamp—Cable	1
19013	Cone—Roller Bearing	6	23662	Valve—Exhaust	4
21033	Bracket—Support	8	23699	Nut—Fuel, Shut-off Lever.....	1
21035	Guard—Belt	4		Used with 3/8" Dia. shut-off lever.	
21240	Head—Cylinder	4		Note: No. 23346 Nut—Fuel, Shut-off Lever	1
22006	Washer—Bearing Sleeve	1		Used with 3/8" Dia. shut-off lever.	
22012	Cover and Bracket—Valve.....	4	23791	Connector—Oil Tube	1
22013	Lever—Throttle	4	26014	Casing—Choke Wire—9 1/2" long...	3
22021	Bracket—Throttle Spring	1		Note: If longer casing is needed, order following and cut to re- quired length:	
22076	Fan—Flywheel	8		No. 65606 Casing—Choke Wire— 84" long	1
22158	Bracket—Governor Control	1		No. 68056 Casing—Choke Wire— 36" long	8
22353	Washer—Valve Cover	1		No. 68996 Casing—Choke Wire— 60" long	12
22368	Washer—Control Lever	1	26035	Spring—Stop Pin	1
22371	Shim—Connecting Rod	1	26185	Spring—Idle Adjusting Screw.....	1
22372	Clamp—Control Casing	1	26195	Link—Throttle	1
22547	Screen—Fuel Filter, with rectangular hole	1	26276	Crankshaft	6
	Note: For screen with round hole order No. 62876	1		Note: No. 26004 Crankshaft.....	6
	Use No. 62477 screen on earlier model engines with Tillotson Fuel Filter	1		Used on type Nos. 20078, 20391, 20408, 20412, 20987, 25264, 25265, 25291, 25302, 25307, 25404, 25407, 25424, 25432, 25433, 25439, 25446, 25471, 25472, 60183, 60244, 60342, 60346, 60354, 60368, 60379, 60440, 60488, 60566, 60581, 60609, 60683, 60762, 60921, 60942, 60947.	
22715	Shim—.003" thick	1		No. 26015 Crankshaft.....	6
22716	Shim—.010" thick	1		Used on type No. 60744.	
22725	Washer—Control Lever	1		No. 26056 Crankshaft.....	6
22781	Retainer—Oil Tube	1		Used on type No. 60933.	
22826	Washer—Governor Crank	1		No. 26060 Crankshaft.....	6
22834	Washer—Spacer	1		Used on type Nos. 20807, 60595, 60607.	
22944	Lock—Connecting Rod Screw.....	1		No. 26076 Crankshaft.....	6
23088	Pin—Pivot	1		Used on type Nos. 20398, 20937, 25266, 25267, 25404, 25405, 25406, 25410, 25468, 25469, 25473, 25616, 25617, 25626, 25640, 95117, 95123, 95129, 95276.	
23093	Coupling—Drive Shaft	12			
23094	Shaft—Drive	12			
23095	Stud—Spacer	1			
23096	Rod—Shift (Lower)	2			
23097	Rod—Shift (Upper).....	2			
23098	Coupling—Shift Rod	1			
23132	Plunger—Oil Pump	1			
23164	Screw—Idle Adjusting	2			
23168	Screw—Throttle Lever	1			
23175	Locknut—Bearing Sleeve	1			
23176	Sleeve—Bearing	2			
23179	Key—Pulley	1			
23180	Spacer—Throttle Lever	1			
23208	Spacer—Throttle Lever	1			
23402	Locknut—Contact Screw	1			
23571	Swivel—Control Lever	1			
23580	Bushing—Control Lever	1			

U. S. A. Prices. Prices outside of U. S. A. subject to local import duties, taxes, etc.

THIS BOOK COVERS 5 DIGIT TYPE NUMBERS ONLY — 20028 TO 95296 (INCL.)

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
	No. 26103 Crankshaft.....	6 ..		No. 90832 Lockwasher —	
	Used on type Nos. 20783, 25383.			1/4x3/8x6" (2) ..	1
	No. 26113 Crankshaft.....	6 ..		No. 90847 Nut—Hex.—1/4-28	
	Used on type No. 20823.			(2) ..	1
	No. 26191 Crankshaft.....	6 ..		No. 91398 Screw—Cap, Hex.	
	Used on type Nos. 25355, 25356, 25357, 25358, 25359, 25360, 25374, 25402, 25403, 25438, 25440, 25628, 25639, 25643, 25644.			Hd.—1/4-28x1/2 (2) ..	1
	No. 26277 Crankshaft.....	6 ..		No. 69177 Tank Assembly —	
	Used on type Nos. 20954, 25288, 25401, 25408, 25436, 25442, 25443, 25444, 25445, 25467, 25627, 95108, 95112, 95141, 95274.			Fuel ..	1
	No. 26291 Crankshaft.....	6 ..		Used on type Nos. 20083, 20397.	
	Used on type Nos. 20995, 25412, 25414, 25416, 25431, 25465, 25466, 25470, 25634, 95293.		29065 Tube—Oil Pump ..	No. 68605 Tank Assembly —	2
	No. 26305 Crankshaft.....	6 ..	29072 Case Assembly—Gear ..	Vacuum ..	8
	Used on type Nos. 60367, 60400, 60559, 60560, 60749.		29076 Cylinder Assembly ..	Used on type No. 60729.	
	No. 26311 Crankshaft.....	6 ..		No. 69963 Tank Assembly —	
	Used on type Nos. 20440, 20454, 20845, 25426, 25434, 25448, 60276, 60359, 60471, 60756.			Fuel (combination) ..	5
	No. 26314 Crankshaft.....	6 ..		Used on type Nos. 25411, 60326, 60345, 60723, 60771, 60843, 60886, 60962.	
	Used on type No. 95286.			Note: No. 28075 Cylinder Assembly	20
	No. 26317 Crankshaft.....	6 ..		Used on type Nos. 20077, 20078, 20391, 20398, 20937, 20987, 25264, 25265, 25266, 25267, 25291, 25302, 25307, 25404, 25405, 25406, 25407, 25410, 25424, 25427, 25432, 25433, 25439, 25446, 25468, 25469, 25471, 25472, 25473, 25616, 25617, 25626, 25640, 60183, 60244, 60342, 60354, 60368, 60379, 60440, 60488, 60566, 60581, 60609, 60683, 60762, 60921, 60942, 60947, 95117, 95123, 95129, 95276.	
	Used on type No. 25311.			No. 29268 Cylinder Assembly	20
	No. 26318 Crankshaft.....	6 ..		Used on type Nos. 20035, 20036, 20038, 20051, 20450, 20484, 20766, 20939, 20993, 25612, 60374, 60432, 60744, 60802.	
	Used on type Nos. 25641, 25642.			No. 29505 Cylinder Assembly	20
	No. 26355 Crankshaft.....	6 ..		Used on type Nos. 60595 60607.	
	Used on type No. 25452.			No. 29647 Cylinder Assembly	20
	No. 68416 Crankshaft.....	6 ..		Used on type Nos. 20408, 20412, 60346.	
	Used on type Nos. 20035, 20036, 20038, 20051, 20766, 20993, 60432.			No. 29777 Cylinder Assembly	20
	No. 68476 Crankshaft (Spur Gear) ..	6 ..		Used on type No. 60311.	
	Used on early Model "AR" Engines.			No. 29923 Cylinder Assembly	20
	No. 68556 Crankshaft.....	6 ..		Used on type No. 60933.	
	Used on type No. 60478.			No. 99131 Cylinder Assembly	20
26413 Spring—Oil Pump ..		1		Used on type No. 20798.	
27090 Gasket—Spark Plug ..		1		No. 99216 Cylinder Assembly	20
27145 Packing—Fuel, Shut-off Lever.....		1		Used on type Nos. 20823, 20995, 25288, 25311, 25412, 25414, 25416, 25431, 25442, 25444, 25465, 25466, 25470, 25627, 25634, 95108, 95112, 95141, 95274, 95293.	
	Used with 3/8" Dia. shut-off lever.			No. 99294 Cylinder Assembly	20
	Note: No. 27019 Packing — Fuel, Shut-off Lever ..	1		Used on type Nos. 20954, 25401, 25408, 25436, 25443, 25445, 25452, 25467, 95286.	
	Used with 3/8" Dia. shut-off lever.			No. 99528 Cylinder Assembly	20
29011 Rod—Oil Pump ..		3		Used on type Nos. 25355, 25356, 25357, 25358, 25359, 25360, 25374, 25402, 25403, 25438, 25440, 25641, 25642, 25643, 25644.	
29027 Lever—Governor ..		4		29087 Clutch Assembly — Pulley (Plain Bearing) ..	7
	Note: No. 29160 Lever.....	4		Used on type No. 60756.	
	Used on type Nos. 60244, 60367, 60368, 60400, 60475.			Note: No. 29617 Clutch Assembly—Pulley (Plain Bearing).....	7
29029 Connecting Rod (Replaced by 89947 Connecting Rod) ..		8		Used on type No. 60756.	
29034 Tank Assembly—Fuel ..		3		(See following page)	
	Note: No. 29579 Tank Assembly—Fuel ..	5			
	Used on type Nos. 25409, 25420.				
	The following parts used with No. 29579 Tank on type Nos. 25409, 25420:				
	No. 22038 Extension—Fuel, Tank Brace ..	6			
	No. 67632 Washer (2).....	1			

U. S. A. Prices. Prices outside of U. S. A. subject to local import duties, taxes, etc.

Before ordering parts, read instructions top page 13.

THIS BOOK COVERS 5 DIGIT TYPE NUMBERS ONLY — 20028 TO 95296 (INCL.)

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
	No. 99488 Clutch Assembly— Pulley (Plain Bearing).....	7 ..		No. 29297 Crank Assembly— Bell	2 ..
	Used on type No. 25426.			Used on type Ncs. 60244, 60367, 60400, 60475, 60566, 60947.	
29092	Stud—Pulley Clutch Spring.....	1 ..		No. 99571 Crank Assembly— Bell	2 ..
29096	Pump Assembly—Oil	8 ..		Used on type Nos. 25469, 25617, 95123.	
29098	Housing Assembly—Blower	10 ..	29222	Cup—Oil (Starter Shaft).....	1 ..
	Note: No. 21412 Housing—Blower..	10 ..	29237	Housing Assembly—Blower	10 ..
	Used on type Nos. 25355, 25357, 25359, 25374, 25402, 25403, 25641, 25643.			Note: No. 99611 Housing Assembly —Blower	10 ..
	No. 29271 Housing Assembly —Blower	10 ..		Used on type Nos. 25356, 25358, 25360, 25438, 25440, 25639, 25642, 25644.	
	Used on type Ncs. 20082, 20083, 20397, 20454, 25391, 60442, 60468, 60475, 60476, 60517, 60630, 60672, 60713, 60729, 60751, 60756, 60810, 60877, 60998, 95263.		29274	Shaft and Lever Assembly—Hand Starter	4 ..
	No. 29498 Housing Assembly —Blower	10 ..	29275	Shaft and Lever.....	4 ..
	Used on type Nos. 25422, 25424, 25455, 25468, 25469, 25472, 25473, 25609, 25610, 25611, 25617, 25619, 60321, 60369, 60379, 60440, 60478, 60609, 60855.		29276	Chain and Sprocket.....	1 8
	No. 61485 Housing—Blower..	10 ..	29277	Pawl Assembly—Starter	8 ..
	Used on type Nos. 20078, 20391, 20412, 20440, 20801, 25282, 25416, 25418, 25458, 60342, 60886.		29288	Horn—Carburetor Air	5 ..
	No. 99827 Housing Assembly —Blower	10 ..		Note: No. 29026 Horn—Carburetor Air	5 ..
	Used on type Nos. 25465, 25634.			Used on type Ncs. 25609, 60321.	
29104	Bushing Assembly—Crankshaft	4 ..		No. 29078 Horn—Carburetor Air	5 ..
	Includes: No. 62346 Ring— Oil Retainer.			Used on type Nos. 60257, 60322, 60464, 60602, 60713, 60778.	
	Note: (No. 99157 Bearing—Ball....	8 ..		No. 69121 Horn—Carburetor Air	5 ..
	(No. 99175 Seal—Oil.....	8 ..		Used on type Nos. 20083, 20397, 60367, 60369, and on Engines Without Fuel Filter.	
	Used on engines with drive side ball bearing not other- wise specified in this note. For engines with drive side ball bearing locked in place. See illustration of Marine Application Parts.		29337	Wire—Choke—11 ³ / ₁₆ " long	2 ..
29107	Plate Assembly—Back	1 8		Note: If longer wire is needed, order following and cut to re- quired length:	
	Note: No. 89143 Plate Assembly— Back	1 8		No. 29168 Wire—Choke—90" long	8 ..
	Used on type Nos. 25465, 25634.			No. 29543 Wire—Choke—60" long	8 ..
	No. 99903 Plate Assembly— Back	1 8		No. 69701 Wire—Choke—36" long	4 ..
	Used on type No. 95293.		29338	Body—Oil Pump	8 ..
29109	Shaft and Gear—Starter.....	2 8	29340	Plunger—Oil Pump	8 ..
	Note: No. 29195 Shaft and Gear— Starter	2 8	29346	Cable—Ignition	2 ..
	Used on type Ncs. 60367, 60559, 60560, 60749.			Note: No. 29552 Cable—Ignition... ..	3 ..
	No. 29637 Shaft and Gear— Starter	2 8		Used on type Ncs. 20819, 20970, 25282, 25412, 25420, 25431, 25464, 25465, 25466, 25470, 25634, 60302, 60329, 60343, 60345, 60484, 60530, 60592, 60782, 60886, 95293.	
	Used on type No. 20937.		29374	Gear—Governor	6 ..
	No. 99427 Shaft and Gear— Starter	2 8	29390	Pulley with Bushing—Clutch.....	3 ..
	Used on type No. 25291.			Note: No. 29616 Pulley with Bush- ing—Clutch	3 8
	Uses: No. 23156 Coupling—Starter..	1 ..		Used on type No. 60756.	
29131	Shield—Spark Plug	6 ..		No. 99492 Pulley with Bush- ing—Clutch	3 8
29135	Carburetor Assembly (Tillotson). Re- placed by No. 29475 Carburetor Assembly	1 ..	29406	Plate Assembly—Clutch	3 ..
29150	Bearing—Ball	4 ..	29447	Cleaner Assembly—Air	3 ..
29151	Seal—Oil	4 ..	29463	Carburetor Assembly	1 ..
29157	Puller—Flywheel	1 ..		Note: No. 29475 Carburetor Assem- bly	1 ..
29208	Crank Assembly—Bell	2 ..		Used on type Ncs. 20083, 20397, 60244, 60367, 60369.	
	Note: No. 29159 Crank Assembly— Bell	2 ..		No. 29490 Carburetor Assem- bly	1 ..
	Used on type No. 60368.			Used on all engines with 1 ¹ / ₈ " dia. intake pipe.	

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MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
29476	Pipe—Fuel—13 $\frac{3}{8}$ " long ..	8		No. 61145 Pulley—Flat Belt (2 $\frac{1}{2}$ " dia.) ..	2 ..
	Note: For other lengths specify:			Used on type Nos. 60771, 60791, 60991.	
	No. 29071 Pipe—Fuel—16" long ..	8		No. 61575 Pulley—Flat Belt (3 $\frac{1}{2}$ " dia.) ..	2 ..
	Used on type No. 60183.			Used on type No. 60471.	
	No. 29348 Pipe—Fuel—15 $\frac{1}{4}$ " long ..	8	29656	Armature Assembly ..	3 ..
	Used on type Nos. 20408, 20412, 60311, 60346.		29679	Cover—Air Cleaner ..	8
	No. 29459 Pipe—Fuel—16 $\frac{1}{4}$ " long ..	8	29680	Filter—Air Cleaner ..	8
	Used on type Nos. 60573, 60735.		29681	Bowl—Air Cleaner ..	12
	No. 69844 Pipe—Fuel—14 $\frac{1}{2}$ " long ..	8	29834	Connecting Rod—	
	Used on type No. 60998.			Replaced by 89947 Connecting Rod. ..	8
	No. 69916 Pipe—Fuel—16 $\frac{1}{2}$ " long ..	8	29861	Condenser ..	2
	Used on type Nos. 60244, 60367, 60368, 60369, 60400, 60475.		29898	Drive Shaft Assembly ..	3 ..
	No. 89092 Pipe—Fuel—14" long ..	8		Note: No. 68236 Drive Shaft (Spur Gear) ..	3 ..
	Used on type No. 25466.			Used on early Model "AR" Engines.	
	No. 99302 Pipe—Fuel—15 $\frac{1}{4}$ " long ..	8	29915	Cover and Seat—Carburetor ..	4
	Used on type Nos. 60468, 60482, 95263.			Note: No. 29916 Cover and Seat—Carburetor ..	4
	No. 99591 Pipe—Fuel—14 $\frac{3}{4}$ " long ..	8		Used on all engines with $\frac{11}{16}$ " dia. intake pipe.	
	Used on type Nos. 25355, 25356, 25357, 25358, 25359, 25360, 25374, 25402, 25403, 25438, 25440, 25639, 25641, 25642, 25643, 25644.			No. 69239 Cover and Seat—Carburetor ..	4
	The following Fuel Pipes and Connections used with No. 69605 Vacuum Tank on type No. 60729:			Used on Engines Without Fuel Filter.	
	No. 63345 Adapter ..	1	29918	Bearing—Ball ..	4
	No. 63719 Spacer ..	1	40437	Lockswitch ..	3
	No. 69883 Hose—Titeflex ..	8	46133	Spring—Spark Plug Shield ..	1
	No. 69879 Pipe—Intake ..	4	46277	Rivet—Tubular— $\frac{1}{2}$ x $\frac{5}{16}$ " ..	1
	No. 91247 Screw—Cap Hex. Hd.— $\frac{1}{2}$ —20x2" ..	1	53029	Connector—Fuel Filter ..	1
	No. 91390 Adapter ..	1	61010	Ring—Piston, Compression—Top and Center—.010" O.S. ..	1
	The following Fuel Pipes and Connections used with No. 69963 Combination Tank on type Nos. 25411, 60326, 60345, 60723, 60771, 60843, 60986, 60962:		61012	Ring—Piston, Compression—Top and Center—.020" O.S. ..	1
	No. 29201 Pipe—Fuel—17" ..	1	61013	Ring—Piston, Compression—Top and Center—.030" O.S. ..	1
	No. 63416 Nut—Check ..	1	61142	Lever—Hand Starter ..	2 8
	No. 65804 Plug—Check Valve ..	1		Note: No. 61137 Pedal—Foot Starter ..	2 8
	No. 69836 Valve—Fuel Shut-off ..	3		Used on type Nos. 20454, 25321, 60482, 60630, 60672, 60877, 60998, 95263.	
	No. 69914 Pipe—Fuel—1 $\frac{1}{8}$ " long ..	2		No. 61141 Pedal—Foot Starter (Left Hand Offset) ..	2 8
	No. 69915 Tee ..	1		Used on type No. 25391.	
	No. 99008 Pipe—Fuel—3 $\frac{7}{8}$ " long ..	1	61157	Elbow—Air Cleaner ..	3
29501	Clutch Assembly—Pulley (Ball Bearing) ..	7 ..	61167	Gear—Cam ..	3 ..
29503	Plate and Ring Assembly—Clutch ..	4 ..	61186	Cover—Carburetor, Bowl ..	2
29504	Plate Assembly—Clutch ..	2 ..	61265	Ring—Pulley Clutch ..	1 ..
29569	Pump Assembly—Oil ..	1 8	61486	Bracket—Fuel Tank ..	2 8
29632	Cover Assembly—Carburetor ..	4		Note: No. 61410 Bracket—Fuel Tank ..	2 ..
	Note: No. 29645 Cover Assembly—Carburetor ..	4		Used on type Nos. 20083, 20397.	
	Used on all engines with $\frac{11}{16}$ " dia. intake pipe.			No. 61580 Bracket—Fuel Tank ..	2 8
29636	Pulley Assembly "V" Belt (3" dia.) ..	1 ..		Used on type Nos. 25391, 60468, 60475, 60476, 60482, 60517, 60672, 60713, 60756, 60810, 60877, 60998, 95263.	
	Note: No. 61133 Pulley—Flat Belt (3 $\frac{1}{2}$ " dia.) ..	2 ..	61505	Ring—Piston Oil—Standard ..	1
	Used on type No. 60992.		61506	Cover—Gear Case ..	4 ..
			61579	Bracket—Starter Shaft ..	2 ..
			61664	Pipe—Air Cleaner ..	2 ..
			61747	Ring—Piston Oil—.010" O.S. ..	1
			61748	Ring—Piston Oil—.020" O.S. ..	1
			61749	Ring—Piston Oil—.030" O.S. ..	1
			61959	Pulley—Drive ..	3
			61994	Ring—Adapter ..	1 ..
			62015	Guard—Ratchet ..	3 ..
			62039	Shell—Air Cleaner ..	3
			62042	Washer—Air Cleaner ..	1
			62082	Washer—Oil Screen ..	1
			62100	Stop—Contact Spring ..	1

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MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
62154	Cover—Valve	4	63493	Shaft—Governor Gear	1
62177	Strap—Blower Housing Mounting... ..	1	63498	Bushing—Gear Case	4
62178	Plate—Contact Block	1	63524	Screw—Clutch Adjusting	1
62199	Washer—Bell Crank	1	63526	Bushing—Pulley Clutch	1
62233	Cup—Valve Spring	1	63531	Pipe—Carburetor Intake	4
62235	Ring—Oil Retainer	1	63532	Spacer—Carburetor Mounting	1
62254	Cup—Starter Spring	2	63601	Nut—Flywheel	1
62304	Switch—Stop	1	63602	Nut—Starter Ratchet	3
	Note: No. 62338 Switch Stop.....	1	63605	Bushing—Starter Shaft	2
	Used on type Nos. 60257, 60322, 60464, 60484, 60602, 60713, 60778.		63653	Key—Pulley Clutch	1
	No. 62998 Switch—Stop.....	1	63689	Screw—Connecting Rod	1
	Used on type Nos. 25355, 25356, 25357, 25358, 25359, 25360, 25374, 25402, 25403, 25438, 25440, 25639, 25641, 25642, 25643, 25644.		63733	Stud—Air Cleaner	2
62335	Shield—Cylinder	4	63745	Connector—Fuel Pipe	1
	Note: No. 62345 Plate—Deflector... ..	8		Note: No. 63486 Connector — Fuel Pipe	1
	Used in addition to No. 62335 on type No. 60265.			Used on Engines Without Fuel Filter.	
	No. 22009 Shield—Cylinder..	4	63821	Wrench—Socket Hd. Screw.....	1
	Used on type Nos. 25355, 25356, 25357, 25358, 25359, 25360, 25374, 25402, 25403, 25438, 25440, 25639, 25641, 25642, 25643, 25644.		63848	Spacer—Air Cleaner Pipe.....	1
62342	Cover—Pulley Clutch	6	63849	Stud—Air Cleaner Pipe.....	2
62346	Ring—Oil Retainer	1	63864	Spacer—Bearing	1
62352	Washer—Starter Pinion	1	63865	Pin—Bearing Retainer	1
62362	Lock—Starter Pinion	1	64139	Pin—Chain Connector	1
62446	Strap—Air Cleaner Mounting.....	1	64539	Clamp—Ground	3
62447	Strap—Air Cleaner Mounting.....	1	65078	Block—Contact Spring	1
62911	Lever—Shift	6	65098	Lining—Pulley Clutch	4
62914	Washer—Shift Lever Mounting.....	1	65124	Gasket—Connector	1
62915	Plate—Pulley	6	65126	Spring—Throttle	1
62976	Washer—Starter Pedal Mounting... ..	1		Note: No. 67956 Spring—Throttle... ..	1
63033	Pin—Float Lever	1		Used on type Nos. 60244, 60367, 60400, 60475.	
63067	Bushing—Bell Crank	1	65134	Gasket—Needle Valve	1
63074	Pipe—Carburetor Intake— $\frac{1}{8}$ " Dia... ..	1	65198	Cover—Magneto Point	1
	Note: No. 68413 Pipe — Carburetor Intake—$\frac{1}{8}$" Dia.	1	65244	Gasket—Connector	1
	Used on all engines with $\frac{1}{8}$ " dia. intake opening.		65264	Gasket—By-pass Tube	1
63092	Spacer—Engine Mounting	1	65304	Gasket—Oil Filler Cap	1
63136	Pin—Needle Valve Stop.....	1	65367	Felt—Ratchet Nut	1
63157	Screw—Carburetor Air Bleed.....	1	65387	Packing—Needle Valve	1
	Note: No. 92117 Screw—Carburetor Air Bleed	1	65414	Plunger—Magneto Point	1
	Used on type No. 95293.		65451	Ring—Piston, Compression, Top and Center, Standard	1
63159	Key—Pulley	1	65516	Spring—Pawl	1
	Note: No. 63537 Key—Pulley.....	1	65616	Casing—Control Wire (72" long)... ..	8
	Used on type Nos. 20939, 60265, 60583.			Note: No. 26184 Casing — Control Wire. (Brass)—60" long... ..	8
63165	Plug—Carburetor Drain	1		Used on type No. 25374. No. 26189 Casing — Control Wire. (Brass)—80" long... ..	8
63182	Nozzle—By-pass	1		Used on type Nos. 25402, 25403, 25438, 25440, 25639. No. 26245 Casing — Control Wire. (Stainless Steel)—54" long	8
63186	Screw—Throttle Adjusting	1		Used on type No. 60369. For all other types, if longer casing is needed, specify length in inches; if shorter casing is needed, order No. 65616 and cut to required length.	
63189	Screw—Idle Adjusting	1	65617	Gasket—Valve—Cover	1
63199	Pin—Starter Shaft	1	65667	Gasket—Carburetor Barrel	1
63238	Screw—Contact Point	1	65724	Gasket—Carburetor Cover	1
63269	Washer—Pulley Clutch	1		Note: No. 65244 Gasket—Carburetor Cover	1
63277	Tappet—Valve	2		Used on Engines Without Fuel Filter.	
63294	Pin—Pulley Clutch—Lining	1	65725	Insulator—Armature Lead	1
63336	Spacer—Cylinder Head (long).....	1	65734	Gasket—Carburetor Cover	1
63337	Spacer—Cylinder Head (short).....	1		Note: No. 65124 Gasket—Carburetor Cover	1
	Note: No. 63423 Spacer — Cylinder Head	1		Used on Engines Without Fuel Filter.	
	Used on type Nos. 20083, 20397.		65737	Gasket—Carburetor Cover	1
63377	Connector—Fuel Pipe	1	65818	Belt—Drive	6
63382	Cup—Roller Bearing	6	65828	Disc—Pulley	6
63426	Locknut—Control Wire Casing.....	1	65906	Spring—Intake and Exhaust Valve..	2
63486	Connector—Fuel Pipe	1			
63491	Pinion—Starter	4			
63492	Bushing—Governor Crank	1			

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MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
65976	Spring—Throttle Lever	1	69241	Tube Assembly—Control Casing....	2
65986	Link—Throttle	1		<i>Note:</i> No. 29205 Tube Assembly—	
66056	Spring—Starter Lever Return.....	3		Control Casing	2
66186	Spring—Throttle Adjusting	1		Used on type Nos. 60368,	
66246	Lock—Piston Pin	1		60379, 60440.	
66403	Key—Flywheel	1		No. 29207 Tube Assembly—	
66457	Gasket—Magneto Plate—.015" thick ..	1		Control Casing	2
66527	Gasket—Magneto Plate—.005" thick ..	1		Used on type No. 60371.	
66537	Gasket—Magneto Plate—.009" thick ..	1		No. 29399 Tube Assembly—	
66733	Ratchet—Starter	3		Control Casing	2
66773	Nut—Needle Valve Packing.....	1		Used on type Nos. 60573,	
66783	Gland—Carburetor	1		60735.	
66796	Spring—Idle Valve Adjusting.....	1		No. 29440 Tube Assembly—	
66813	Screw—Carburetor Vent	1		Control Casing	2
66937	Gasket—Gear Case	1		Used on type Nos. 20945,	
66947	Gasket—Gear Case Cover.....	1		60942.	
66979	Rope—Starter	4		No. 29461 Tube Assembly—	
	<i>Note:</i> No. 69932 Rope—Starter.....	4		Control Casing	2
	Used on type Nos. 20412,			Used on type Nos. 25472,	
	20798, 25630.			60597, 60609.	
66987	Gasket—Engine Base	2		No. 29643 Tube Assembly—	
67216	Spring—Pulley Clutch	1		Control Casing	2
67247	Gasket—Air Cleaner Mounting.....	1		Used on type No. 60777.	
67266	Wire—Control—79" long	2		No. 29688 Tube Assembly—	
	<i>Note:</i> No. 26183 Wire — Control			Control Casing	2
	(Bronze)—64" long	2		Used on type Nos. 60566,	
	Used on type No. 25374.			60947.	
	No. 26188 Wire — Control			No. 69411 Tube Assembly—	
	(Bronze)—84" long	2		Control Casing	2
	Used on type Nos. 25402,			Used on type Nos. 60244,	
	25403, 25438, 25440, 25639.			60867, 60400, 60475, 60559,	
	No. 26246 Wire — Control			60560, 60745, 60749.	
	(Stainless Steel)—60" long.	2		No. 99239 Tube Assembly—	
	Used on type No. 60369.			Control Casing	2
	For all other types, if longer			Used on type No. 20937.	
	wire is needed, specify			No. 99572 Tube Assembly—	
	length in inches; if shorter			Control Casing	2
	wire is needed, order No.			Used on type Nos. 25469,	
	67266 and cut to required			25617, 95123.	
	length.			No. 99582 Tube Assembly—	
67316	Spring—Throttle Return	1		Control Casing	2
67897	Gasket—Air Cleaner Cover.....	2		Used on type Nos. 25374,	
67992	Clip—Throttle Spring	1		25402, 25403, 25438, 25440,	
68122	Plug—Cam Shaft	1		25639.	
68152	Screen—Carburetor Inlet	1		No. 99590 Tube Assembly—	
68156	Spring—Starter Crank	1		Control Casing	2
68227	Gasket—Gear Case Cover.....	1		Used on type Nos. 25383,	
68283	Collar—Valve Spring	1		25452.	
68293	Washer—Valve Spring Retainer....	1	69296	Barrel—Carburetor	8
68333	Shaft—Cam Gear	4		<i>Note:</i> No. 69271 Barrel—Carburetor	8
68449	Muffler	1		Used on all engines with $\frac{1}{8}$ "	
68477	Gasket—Fuel Filter Bowl.....	1		dia. intake pipe.	
	<i>Note:</i> No. 67267 Gasket—Fuel Filter		69298	Strap—Fuel Tank	6
	Bowl	1		<i>Note:</i> No. 62034 Strap—Fuel Tank..	6
	Used on earlier model en-			Used on type Nos. 20083,	
	gines with Tillotson Fuel			20397.	
	Filter.		69345	Cap Assembly—Oil Filler.....	2
68487	Bowl—Fuel Filter	2	69423	Cleaner Assembly—Air	12
	<i>Note:</i> No. 67257 Bowl—Fuel Filter..	2		<i>Note:</i> No. 29262 Cleaner Assembly	
	Used on earlier model en-			—Air	12
	gines with Tillotson Fuel			Used on type No. 60370.	
	Filter.		69445	Filter—Air Cleaner	2
68652	Wrench—Spark Plug	6	69446	Stud and Wing Nut.....	2
68803	Collar—Starter Shaft Set.....	2	69460	Valve—Needle	1
68876	Clip—Magneto Point Cover.....	1	69483	Valve and Seat—Fuel Inlet.....	1
68881	Bushing—Starter Spring	1	69498	Valve and Seat—Needle.....	1
68883	Screw—Inlet Connector	1	69499	Body Assembly—Carburetor	1 8
68923	Valve—Intake	4	69696	Pulley with Bearing—Clutch.....	4
69004	Gasket—Cylinder Head	2	69754	Point and Spring—Contact.....	1
69120	Screen—Oil Pump	1	69780	Block Assembly—Contact	8
69121	Horn Assembly—Carburetor Air....	5	69836	Valve—Fuel Shut-off	3
69149	Float—Carburetor	3	69876	Plate—Magneto	2
69207	Float—Carburetor	3	69911	Bushing Assembly—Magneto Plate.	2
				Includes: No. 62235 Ring—	
				Oil Retainer.	
			69928	Link—Starter Chain Connecting....	1

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MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
69961	Cap—Fuel Tank	2	90891	Screw—Cap, Hex. Hd.— $\frac{1}{4}$ — $20 \times \frac{1}{2}$ " ..	1
	Note: No. 65499 Cap—Fuel Tank..	2		Note: No. 90700 Screw—Cap, Hex.	
	Used on type Nos. 20083,			Hd.— $\frac{1}{4}$ — $20 \times \frac{3}{4}$ "	1
	20397.			Used to mount Bell Crank on	
70162	Washer—Control Lever	1		type No. 95071.	
89014	Control Assembly—Governor	4		No. 91253 Screw—Machine,	
89250	Breather Assembly	12		Fill. Hd.— $6-32 \times \frac{5}{8}$ "	1
	Used on engines after Serial			Used to mount Bell Crank on	
	No. 103752.			type No. 60316.	
	Note: No. 69751 Breather Assembly	8	90916	Screw—Machine, Rd. Hd.— $\frac{1}{4}$ —	
	Used on engines before Serial			$20 \times \frac{1}{2}$ "	1
	No. 103752.		90950	Screw—Cap, Hex. Hd.— $\frac{5}{8}$ — $24 \times \frac{3}{4}$ " ..	1
	No. 99598 Breather Assembly	12	90969	Lockwasher— $\frac{5}{8}$ " $\times \frac{1}{8} \times \frac{3}{32}$ "	1
	Used on type Nos. 20408,		91028	Screw—Cap, Hex. Hd.— $\frac{3}{8}$ — $24 \times \frac{3}{4}$ " ..	1
	20412, 60311, 60346.		91122	Lockwasher—Shakeproof No. 1206..	1
89307	Valve—Oil Return	1	91134	Screw—Air Bleed (Tilloison)	1
89567	Muffler	1	91152	Screw—Plug (Tilloison)	1
89947	Connecting Rod	8	91162	Screw—Gear Case Cover and Cylin-	
90056	Screw—Machine, Rd. Hd.— $6-$			der Head	1
	$32 \times \frac{5}{8}$ "	1	91195	Screw—Machine, Rd. Hd.— $\frac{1}{4}$ —	
90080	Screw—Machine, Rd. Hd.— $10-$			$20 \times \frac{3}{8}$ "	1
	$32 \times \frac{7}{8}$ "	1	91196	Screw—Machine, Fill. Hd.— $\frac{1}{4}$ —	
90081	Screw—Machine, Rd. Hd.— $10-$			$20 \times \frac{3}{8}$ "	1
	$32 \times \frac{1}{2}$ "	1		Note: No. 90891 Screw—Cap, Hex.	
	Note: No. 90078 Screw—Machine,			Hd.— $\frac{1}{4}$ — $20 \times \frac{1}{2}$ "	1
	Rd. Hd.— $10-32 \times \frac{5}{8}$ "	1		Used on type No. 60316.	
	Used on type No. 25466.		91203	Screw—Cylinder Head	1
90083	Screw—Machine, Rd. Hd.— $10-$		91208	Nut—Hex.— $\frac{5}{8}$ — 24	1
	$32 \times \frac{3}{8}$ "	1	91229	Screw—Cap, Hex. Hd.— $\frac{1}{2}$ — $20 \times 1 \frac{1}{4}$ " ..	1
90194	Screw—Machine, Fill. Hd.— $6-$		91237	Lockwasher— $\frac{1}{4} \times \frac{3}{8} \times \frac{3}{4}$ "	1
	$32 \times \frac{1}{2}$ "	1	91239	Screw—Parker Kalon—No. $10 \times \frac{3}{4}$ " ..	1
90200	Screw—Machine, Fill. Hd.— $8-$		91242	Locknut—Exhaust Elbow	1
	$32 \times \frac{1}{2}$ "	1	91245	Nipple—Exhaust	2
90202	Screw—Machine, Fill. Hd.— $10-$			Note: No. 23338 Nipple—Exhaust..	2
	$32 \times \frac{1}{2}$ "	1		No. 92118 Coupling—Exhaust	
90310	Nut—Hex.— $6-32$	1		Nipple	2
90313	Nut—Hex.— $8-32$	1		Used on type Nos. 25613,	
90355	Nut—Hex.— $10-32$	1		95293.	
90366	Lockwasher— $\frac{5}{8} \times \frac{1}{8} \times \frac{1}{6}$ "	1		No. 91447 Nipple—Exhaust..	2
90367	Lockwasher—No. $8 \times \frac{1}{4} \times \frac{3}{32}$ "	1		Used on type Nos. 25472,	
90386	Screw—Starter Bracket	1		60509.	
90576	Nut—Hex.— $8-32$	1	91246	Elbow— $\frac{3}{4}$ "— 45°	2
90680	Screw—Set, Sq. Hd.— $\frac{5}{8}$ — $18 \times \frac{1}{2}$ " ..	1		Note: No. 91205 Elbow— $\frac{3}{4}$ "— 90° ..	2
	Note: No. 91279 Screw—Set, Sq. Hd.			Used on type Nos. 25466,	
	— $\frac{3}{8}$ — $16 \times \frac{1}{2}$ "	1		25469, 25611, 25617, 25619,	
	Used with No. 61145 Pulley.			60379, 60387, 60440, 60573,	
	No. 91363 Screw—Set, Sq. Hd.			60942.	
	— $\frac{3}{8}$ — $16 \times \frac{3}{8}$ "	1	91247	Screw—Cap, Hex. Hd.— $\frac{1}{2}$ — 20×2 " ..	1
	Used with Nos. 61133 and		91248	Nut—Hex.— $\frac{1}{2}$ — 20	1
	290424 Pulley.		91253	Screw—Machine, Fill. Hd.— $6-$	
	No. 91581 Screw—Set, Head-			$32 \times \frac{5}{8}$ "	1
	less— $\frac{3}{8}$ — $16 \times \frac{3}{8}$ "	1	91256	Screw—Machine, Fill. Hd.— $\frac{1}{4}$ —	
	Used with No. 61575 Pulley.			20×1 "	1
90683	Lockwasher— $\frac{1}{2} \times \frac{1}{8} \times \frac{1}{8}$ "	1	91270	Screw—Machine, Rd. Hd.— $\frac{1}{4}$ —	
90781	Screw—Machine, Fill. Hd.— $8-$			20×1 "	1
	$32 \times \frac{5}{8}$ "	1	91282	Screw—Machine, Fill. Hd.— $10-$	
90783	Screw—Cap, Hex. Hd.— $\frac{1}{2}$ — $20 \times 2 \frac{1}{4}$ " ..	1		$32 \times \frac{3}{8}$ "	1
90832	Lockwasher— $\frac{1}{4} \times \frac{3}{8} \times \frac{3}{4}$ "	1	91284	Screw—Machine, Fill. Hd.— $10-$	
90878	Plug—Pipe— $\frac{1}{4}$ "	1		$32 \times \frac{1}{4}$ "	1
	Note: No. 91488 Plug—Pipe— $\frac{1}{8}$ " ..	1	91324	Washer— $\frac{1}{4}$ " Standard	1
	Used on type Nos. 25355,		91366	Screw—Machine, Rd. Hd.— $10-$	
	25356, 25357, 25358, 25359,			$32 \times \frac{7}{8}$ "	1
	25360, 25374, 25402, 25403,		91385	Screw—Magneto Mounting	1
	25438, 25440, 25641, 25642,		91386	Screw—Cylinder Head (Short)	1
	25643, 25644.		91387	Screw—Cylinder Head (Leng)	1
90886	Plug—Pipe— $\frac{1}{2}$ " Sq. Hd.	1	91388	Lockwasher— $\frac{1}{8} \times \frac{3}{8} \times \frac{3}{8}$ "	1
	Note: No. 91689 Plug—Pipe— $\frac{1}{2}$ "		91389	Screw—Cap, Hex. Hd.— $\frac{1}{4}$ — $20 \times 1 \frac{1}{8}$ " ..	1
	Countersunk Hd.	1	91466	Lockwasher— $\frac{3}{8} \times \frac{3}{8} \times \frac{1}{8}$ "	1
	Used on type Nos. 25383,		91478	Key—Pulley Clutch	1
	25452, 25472, 25628, 60609.		91507	Elbow—Street— $\frac{1}{4}$ "	2
90887	Screw—Cap, Hex. Hd.— $\frac{3}{8}$ — $16 \times 1 \frac{1}{4}$ " ..	1		Used with Fuel Tank on type	
	Note: No. 23136 Stud.	1		Nos. 20083, 20397.	
	No. 92292 Nut—Hex.— $\frac{3}{8}$ — 24 ..	1	91521	Washer—Flywheel	1
	Used on engines with Alumi-			Used on engines Without Starters.	
	num Bases.		91523	Nipple—Oil Filler	2
			91524	Screw—Cap, Fill. Hd.— $\frac{1}{4}$ — $20 \times 1 \frac{1}{4}$ " ..	1

U. S. A. Prices. Prices outside of U. S. A. subject to local import duties, taxes, etc.

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THIS BOOK COVERS 5 DIGIT TYPE NUMBERS ONLY — 20028 TO 95296 (INCL.)

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
91566	Screw—Machine, Rd. Hd.— $\frac{5}{16}$ —18x $\frac{3}{4}$ "	1		No. 99032 Crank—Starter....	2 ..
91575	Screw—Cap, Hex. Hd.— $\frac{3}{16}$ —18x $\frac{3}{4}$ "	1		Used on type Nos. 20036, 20051, 20429, 20766, 20937, 20954, 60368, 60432, 60607, 60768, 95108, 95141.	
91635	Connector—Fuel Filter	1			
91643	Nut—Castellated— $\frac{1}{4}$ —28	1			
91648	Screw—Cap, Hex. Hd.— $\frac{5}{16}$ —24x $\frac{1}{2}$ "	1	99157	Bearing—Ball	8
91674	Nut—Wing	1	99175	Seal—Oil	8
91691	Screw—Machine, Fill. Hd.— $\frac{1}{4}$ —20x $\frac{5}{8}$ "	1	99321	Arrester—Flame	1 ..
91692	Nut—Carburetor Cover	1	99329	Bracket Assembly—Support	8
	Note: No. 68883 Screw—Inlet Connector	1	99330	Retainer with Ball Bearing	1 ..
	Used on engines without Fuel Filters.		99412	Transmission Assembly	10 ..
91744	Nut—Hex.— $\frac{5}{16}$ —24	1	99413	Pulley—Drive	1 8
91865	Lockwasher— $\frac{5}{16}$ x $\frac{3}{16}$ x $\frac{1}{16}$ "	1	99515	Seal—Oil	4
91896	Key—No. 5 Woodruff	1	99548	Control Assembly—Throttle	8
91915	Screw—Cap, Hex. Hd.— $\frac{5}{16}$ —24x $\frac{3}{4}$ "	1	99573	Bowl—Carburetor	4
91917	Nut—Castellated— $\frac{1}{4}$ —28	1		Used on engines with $\frac{1}{16}$ " outside dia. Carburetor Intake Pipe.	
91919	Nut—Castellated— $\frac{1}{2}$ —20	1	99665	Yoke Assembly—Fuel Filter	2
91975	Screw—Cap, Socket Hd.— $\frac{5}{16}$ —24x $\frac{1}{4}$ "	1		Note: No. 89743 Yoke Assembly—Fuel Filter	2
91984	Pin—Cotter— $\frac{1}{8}$ x $\frac{1}{2}$ " long	1		Used on earlier model engines equipped with Tillotson Fuel Filter.	
91985	Pin—Cotter— $\frac{3}{32}$ x $\frac{1}{2}$ " long	1	99824	Control Assembly—Choke Rod	1
91986	Screw—Set—Socket Hd.— $\frac{1}{8}$ —24x $\frac{3}{8}$ "	1	99909	Cover—Fuel Filter	3
92129	Nut—Hex.— $\frac{1}{4}$ —28	1		Note: No. 61895 Cover—Fuel Filter. Used on earlier model engines with Tillotson Fuel Filter.	3
92146	Screw—Connecting Rod	1	99910	Filter Assembly—Fuel	10
92268	Lockwasher— $\frac{3}{8}$ x $\frac{1}{8}$ x $\frac{3}{32}$ "	1	99920	Piston Assembly—Standard	8
92272	Screw—Cap, Hex. Hd.— $\frac{5}{16}$ —18x $\frac{3}{4}$ "	1	99967	Piston Assembly—.010" O.S.	8
92279	Screw—Cap, Hex. Hd.— $\frac{5}{16}$ —24x $\frac{1}{2}$ "	1	99968	Piston Assembly—.020" O.S.	8
92284	Nut—Flywheel	1	99969	Piston Assembly—.030" O.S.	8
92285	Pin—Cotter—No. 18x $\frac{1}{4}$ " long	1	290059	Lever—Fuel Shut-off— $\frac{3}{8}$ " Dia. "T" shaped	2
92287	Screw—Machine, Rd. Hd.—10—32x $\frac{1}{4}$ "	1		Note: No. 23347 Lever—Fuel Shut-off— $\frac{3}{8}$ " Dia. "L" shaped..	2
92288	Pin—Cotter— $\frac{1}{8}$ x $\frac{1}{2}$ " long	1		No. 29536 Lever—Fuel Shut-off	4
92290	Lockwasher—No. 10x $\frac{1}{8}$ x $\frac{3}{32}$ "	1		Used on earlier model engines with Tillotson Fuel Filter.	
92296	Screw—Connecting Rod	1	290412	Flywheel Assembly	13 ..
92305	Washer—Governor Retainer, Control Lever ($\frac{1}{16}$ " Thick)	1		Supersedes, and is interchangeable with No. 61451 Flywheel Assembly.	
92306	Screw—Cap, Hex. Hd.— $\frac{1}{4}$ —28x $\frac{5}{8}$ "	1		Note: No. 99828 Flywheel Assembly Used on type Nos. 25465, 25634.	13 ..
	Note: No. 90802 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ —20x $\frac{1}{2}$ "	1	290552	Drive Shaft and Gear Case Cover Assembly	9 ..
	No. 92278 Nut, Hex. Hd.— $\frac{1}{4}$ —20	1	290559	Case Assembly—Gear	6 ..
	Used on type Nos. 25469, 25472, 25611, 25617, 25619, 60370, 60379, 60387, 60440, 60609.		290560	Cover Assembly—Gear Case	4
	No. 91498 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ —20x $\frac{1}{4}$ "	1	290568	Lever Assembly—Control (Stamped Steel)	4
	No. 90832 Lockwasher— $\frac{1}{4}$ x $\frac{3}{8}$ x $\frac{3}{32}$ "	1		Note: No. 29035 Lever Assembly—Control (Cast Iron)	8
	No. 92278 Nut—Hex.— $\frac{1}{4}$ —20	1		Used on type Nos. 25469, 25472, 25617, 25619, 60370, 60371, 60379, 60387, 60440, 60573, 60609, 60735.	
	Used on type Nos. 60371 60573, 60735.			No. 29113 Idling Device	1
92308	Screw—Machine, Fill. Hd.—10—32x $\frac{1}{4}$ "	1		Used on type Nos. 60313, 60607.	
92322	Screw—Set, Sq. Hd.— $\frac{3}{8}$ —16x $\frac{1}{2}$ "	1		The following parts used with No. 29113 Idling Device:	
92424	Screw—Machine, Fill. Hd.— $\frac{1}{4}$ —20x $\frac{1}{2}$ "	1		No. 63535 Bushing	1
92425	Nut—Sq.— $\frac{1}{4}$ —20	1		No. 90931 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ —20x $\frac{1}{2}$ "	1
99027	Crank—Starter	2 ..		No. 69986 Lever Assembly—Control (Cast Iron)	8
	Note: No. 29156 Coupling—Starter..	12		Used on type No. 60324.	
	Used on type No. 25291.			(See following page)	
	No. 29655 Crank—Starter....	2 ..			
	Used on type No. 60777.				
	No. 61514 Crank—Starter....	2 ..			
	Used on type No. 60350.				
	No. 61519 Crank—Starter....	2 ..			
	Used on type Nos. 60367, 60416, 60417, 60559, 60560, 60749.				

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THIS BOOK COVERS 5 DIGIT TYPE NUMBERS ONLY — 20028 TO 95296 (INCL.)

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
	No. 89583 Lever Assembly—Control (Cast Iron).....	.. 8		Includes: No. 66165 Wire—Ground ..	1
	Used on type Nos. 25413, 25630, 60268, 60293, 60296.			No. 290884 Magneto Assembly	7 ..
	Includes: No. 92282 Screw—Machine, Rd. Hd.—10—24x½" ..	1		Used on type Nos. 60257, 60464, 60471.	
	No. 92289 Screw—Machine, Rd. Hd.—10—24x¾" (2) ..	1		Includes: No. 64009 Wire—Ground ..	1
	No. 89623 Lever Assembly—Control (Cast Iron).....	.. 8		No. 290885 Magneto Assembly (With Shielded Ignition Cable)	7 ..
	Used on type Nos. 25374, 25402, 25403, 25438, 25440, 25639.			Used on type Nos. 20970, 25412, 25431, 25470, 60484, 60530.	
290584	Base—Control Lever (Stamped Steel)	.. 2		Includes: No. 66165 Wire—Ground ..	1
	Note: No. 21441 Base — Control Lever (Cast Iron).....	.. 4		No. 290889 Magneto Assembly	7 ..
	Used on type Nos. 25413, 25630, 60268, 60293, 60296.			Used on type No. 25466.	
	No. 65631 Base — Control Lever (Cast Iron).....	.. 4		No. 290891 Magneto Assembly	7 ..
	Used on type Nos. 25469, 25472, 25617, 25619, 60370, 60371, 60379, 60387, 60440, 60573, 60609, 60735.			Used on type No. 29036.	
290605	Pulley Assembly—Roper Starter....	1 4		Includes: No. 64319 Wire—Ground ..	1
	Note: No. 290424 Pulley Assembly—Rope Starter ..	1 ..	290799	Crank Assembly—Governor ..	2
	Used on Power Take-off Side on type Nos. 25429, 60316.		290858	Screen Assembly—Blower Housing.	.. 6
290642	Lever—Control (Stamped Steel).....	.. 2		Note: No. 290860 Screen Assembly	.. 6
290654	Screw and Nut Assembly—Contact Block 1		Blower Housing ..	6
290774	Magneto Assembly ..	7 ..		Used on engines without Starter on Flywheel Side.	
	Note: No. 99668 Magneto Assembly	7 ..	290859	Screen Assembly—Blower Housing.	.. 6
	Used on type No. 25441.			Note: No. 290860 Screen Assembly	.. 6
	Includes: No. 66005 Wire—Ground ..	1		—Blower Housing ..	6
	No. 290743 Magneto Assembly (With Shielded Ignition Cable)	7 ..		Used on Engines without Starter on Flywheel Side.	
	Used on type Nos. 20819, 25282, 25420, 60302, 60329, 60343, 60345, 60592, 60782, 60886.		290918	Lever Assembly—Control ..	4
	No. 290747 Magneto Assembly (Shielded Ignition)	7 ..	290984	Spark Plug, (with Gasket).....	.. 6
	Used on type Nos. 25465, 25634.			Note: No. 99496 Plug—Spark (with Gasket) ..	8
	Includes: No. 66165 Wire—Ground ..	1		Used on Marine type engines only.	
	No. 290883 Magneto Assembly	7 ..	290985	Pin Assembly—Piston—Standard ..	2
	Used on type Nos. 20083, 20397, 20450, 20475, 20484, 20810, 20994, 20995, 25411, 25414, 25416, 25419, 25421, 25427, 25447, 25451, 25453, 25606, 25607, 25608, 25609, 25612, 25633, 60260, 60265, 60318, 60321, 60322, 60359, 60602, 60672, 60713, 60723, 60756, 60765, 60766, 60778, 60810, 60843, 60911, 95286, 95296.		290986	Pin Assembly—Piston—.005" O.S.	2
			291051	Base Assembly—Engine ..	10 ..
				Note: No. 61518 Base—Engine.....	10 ..
				Used on type Nos. 25619, 60367, 60370, 60387, 60400, 60423, 60476, 60559, 60560.	
				No. 61704 Base—Engine.....	10 ..
				Used on type No. 60749.	
				No. 61929 Base—Engine.....	10 ..
				Used on type Nos. 25355, 25356, 25357, 25358, 25359, 25360, 25374, 25402, 25403, 25438, 25440, 25639, 25641, 25642, 25643, 25644.	
				No. 291052 Base Assembly—Engine ..	10 ..
				Used on type Nos. 60491, 60494, 60735.	

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NATION-WIDE SERVICE ORGANIZATION

To provide prompt and efficient service on Briggs & Stratton motors, Authorized Central Service Distributors and Motor Service Stations are located in the principal cities of the United States and Canada.

Each Authorized Service Organization carries a complete stock of original Briggs & Stratton repair parts. Each is equipped with special factory service tools and factory-trained mechanics, assuring expert repair service on all Briggs & Stratton motors.

All Authorized Service Organizations are instructed by the factory to replace free of charge all parts found to be defective in either material or workmanship, according to the conditions of the Briggs & Stratton Guarantee.

All gratis work done under the guarantee is the responsibility of the Authorized Service Organization until all the material involved and supporting facts are submitted to and approved by the factory.

In a difference of opinion regarding a Service Organization's decision, their terms should be accepted and, either through them or direct, have all materials and supporting facts submitted to the factory for review.

Genuine Briggs & Stratton service will assure continuous motor satisfaction. Our long experience in motor maintenance prompts us to urge that all service work be done by an Authorized Service Organization or at our factory. Mechanics unfamiliar with Briggs & Stratton products, or without proper tools, should not be permitted to make major repairs.

Parts and repair work are F. O. B. Factory or any Authorized Briggs & Stratton Central Service Distributor, or Motor Service Station. The Central Service Distributor nearest you (see list below) will be glad to give you the name of our Motor Service Station in your locality. Space does not permit listing here.

Authorized Central Service Distributors

STATE	CITY	NAME	LOCATION
Alabama	Birmingham 3	Birmingham Electric Battery Co.	Ave. B. at 23rd St.
Arizona	Phoenix	Motor Supply Co.	315 N. Central Ave.
California	Los Angeles 15	Electric Equipment Company	1611 S. Hope St.
California	San Francisco 9	Frank Edwards Co., Automotive Service Div.	382-4 Sixth St.
Colorado	Denver 1	Spitzer Electrical Company	43 W. 9th Ave.
Florida	Jacksonville 1	Spencer Electric, Inc.	40 W. Beaver St.
Florida	Miami 32	Electrical Equipment Co.	42-58 N. W. 4th St.
Florida	Tampa 1	Spencer Auto Electric, Inc.	607-11 E. Cass St.
Georgia	Atlanta 3	Auto Electric & Magneto Co.	477 Spring St., N. W.
Illinois	Chicago 18	Mid-States Auto Electric Co.	1905 S. Michigan Ave.
Indiana	Indianapolis 4	Guling Auto Electric Co.	450 N. Capitol Ave.
Iowa	Des Moines 9	Magneto Carburetor & Electric Co., Inc.	1308 Grand Ave.
Kansas	Wichita 2	The E. S. Cowie Electric Co.	230 S. Topeka Ave.
Kentucky	Lexington 34	Kentucky Ignition Co., Incorporated	Rose and Vine Sts.
Louisiana	New Orleans 1	A. C. Suhren Co.	1319 St. Charles Ave.
Louisiana	Shreveport 80	Chain Battery & Automotive Supply, Inc.	Marshall at Colton St.
Massachusetts	Boston 15	Wm. H. Flaherty Co.	48-52 Cummington St.
Michigan	Detroit 1	Auto Electric & Service Corporation	90 Selden Ave.
Minnesota	Minneapolis 2	Reinhard Brothers Co., Inc.	11 S. Ninth St.
Missouri	Kansas City 8	The E. S. Cowie Electric Co.	1819 Wyandotte St.
Missouri	St. Louis 3	Medart Auto Electric Co., Inc.	3134 Washington Blvd.
Montana	Billings	Lee Pasley	20 N. 33rd St.
Nebraska	Lincoln 8	Carl A. Anderson, Inc.	1637 P Street
Nebraska	Omaha 2	Carl A. Anderson, Inc.	16th and Jones St.
New Mexico	Albuquerque	Spitzer Electrical Co.	509 N. 2nd St.
New York	Buffalo 14	The Battery & Starter Co., Inc.	2505 Main St.
New York	New York 23	The Durham Co., Inc.	17 W. 60th St.
New York	Syracuse 4	The Durham Co., Inc.	943 W. Genesee St.
North Carolina	Charlotte 1	Carolina Rim & Wheel Co.	312 N. Graham St.
North Dakota	Fargo	Reinhard Brothers Inc.	301 N. Pacific Ave.
North Dakota	Minot	Reinhard Brothers Inc.	18-20 3rd St., N. E.
Ohio	Cincinnati 2	Gardner, Inc.	213 E. 8th St.
Ohio	Cleveland 15	Electric Power Maintenance Co.	2536-40 Prospect Ave.
Ohio	Toledo 2	The Electric Power Maintenance Co.	26-30 Seventeenth St.
Oklahoma	Oklahoma City 2	American Electric Ignition Co.	124 N. W. 8th St.
Oregon	Portland 9	Tracey & Co., Inc.	N. W. 10th and Glisan
Pennsylvania	Philadelphia 30	Auto Equipment & Service Co., Inc.	1522-24 Fairmount Ave.
Pennsylvania	Pittsburgh 24	Pitt Auto Electric Company	5135 Baum Blvd.
South Dakota	Aberdeen	Reinhard Brothers Co., Inc.	317 S. Lincoln St.
Tennessee	Knoxville 7	R. T. Clapp Company	401-7 N. Broadway
Tennessee	Memphis 4	Automotive Electric Service Co.	982 Linden Ave.
Texas	Amarillo	The E. S. Cowie Electric Co.	700 Van Buren St.
Texas	Dallas 1	Beard & Stone Electric Company, Inc.	2101 Bryan St.
Texas	El Paso	Motor Supply Co.	308 Chihuahua St.
Texas	Houston 1	Beard & Stone Electric Company, Inc.	Millam at Polk Ave.
Texas	San Antonio 6	S. X. Callahan	425 N. Flores St.
Utah	Salt Lake 13	Frank Edwards Co., Motor Equipment Div.	605-609 So. State St.
Virginia	Richmond	Richmond Battery & Ign. Corp.	1319 W. Broad St.
Washington	Seattle 14	Sunset Electric Co.	300 Westlake North
Washington	Spokane	Sunset Electric Co.	First and Adams
Wisconsin	Milwaukee 2	Wisconsin Magneto Co.	918 N. Broadway
DOMINION OF CANADA			
Manitoba	Winnipeg	Beattie Auto Electric Limited	176 Fort St.
Ontario	Toronto 5	Auto Electric Service Company, Limited	1009-27 Bay St.

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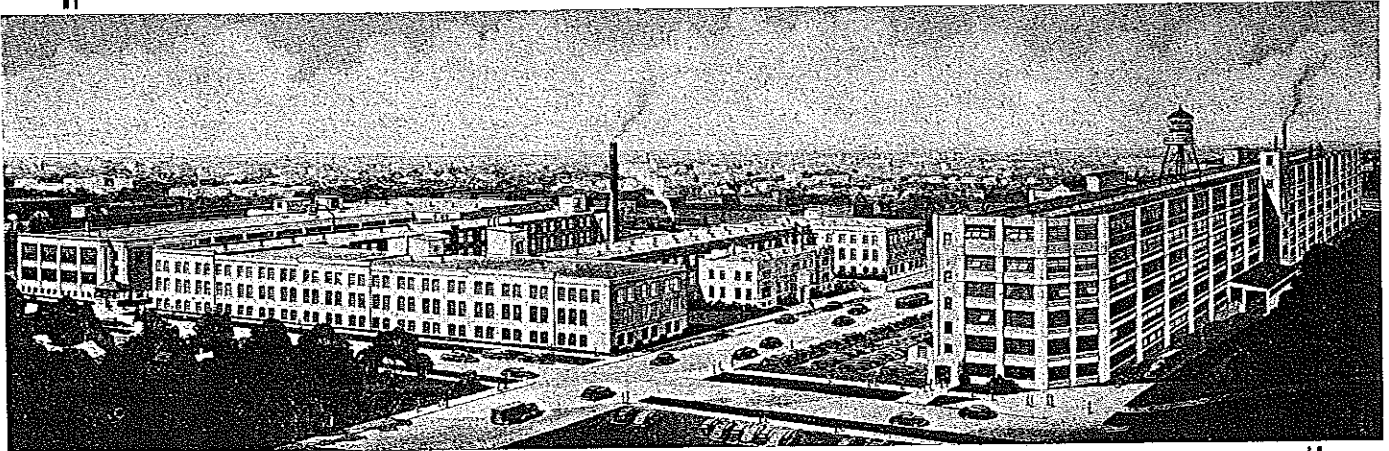


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Briggs & Stratton Service

THE GUARANTEE—For Ninety Days from purchase date, Briggs & Stratton Corporation will replace for the original purchaser, FREE OF CHARGE, any part or parts found, upon examination at our factory at Milwaukee, Wisconsin, or at any Authorized Central Service Distributor's place of business, to be defective under normal use and service, on account of defects in material or workmanship.

All transportation charges on part or parts submitted for replacement under the guarantee must be borne by purchaser.

WHAT THIS GUARANTEE DOES NOT INCLUDE—This guarantee does not cover the free replacement of parts inoperative because of wear occasioned by use. It does not cover the labor cost of replacing parts, neither is it effective if the motor has been the subject of misuse, negligence, or accident, nor if it has been repaired or altered outside of our Milwaukee Factory or any Authorized Central Service Distributor in any way which, in our judgment, affects its condition or operation.



WHERE BRIGGS AND STRATTON MOTORS
ARE MADE

THESE large and modern factory buildings, located in Milwaukee, Wisconsin, are complete with all modern equipment and machinery for precision construction, economical production, rigid inspection and thorough testing of Briggs & Stratton 4-cycle gasoline motors.

Briggs & Stratton Corp. produces more small 4-cycle air-cooled gasoline motors than any other manufacturer in the world.

BRIGGS & STRATTON CORP., MILWAUKEE 1, WIS.